



# COURSE GUIDE GLOBAL SUSTAINABILITY SCIENCE

2021-2022

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UTRECHT, JUNE 2021

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## A Word of Welcome

Welcome to the Bachelor's programme Global Sustainability Science!

Starting its 6<sup>th</sup> year, the programme builds on the heritage and experience of more than three decades of teaching environmental and sustainability science at Utrecht University.

The Bachelor's programme Global Sustainability Science is part of the Undergraduate School of Geosciences and is organised by the Copernicus Institute of Sustainable Development. The aim of the programme is to teach you the specialised knowledge and professional attitudes and skills you need to become a first class academic in the field of sustainability science. The close link with the excellent research of the Copernicus Institute, combined with the international setting of the Bachelor's programme, and the pleasant working atmosphere will contribute to this aim.

We hope this prospectus will help you to easily find the information relevant to you as a student in this Bachelor's programme. First, a general description of the programme is presented: its structure, its components and some organisational matters. This is followed by information about procedures and the UU-timetable is included in this prospectus. The Education and Examination Regulations 2021-2022 (OER) can be found in Appendix [4.1](#) and [4.2](#), and the Regulations of the Board of Examiners in Appendix 4.3.

At any time during your studies you will need two prospectuses: one from the year you started your Bachelor's programme in Global Sustainability Science (this shows *your* exam programme) and one for the most recent academic year, which includes the latest Rules & Regulations.

This course manual contains the answers to most of the questions that you may have about your study programme. For more information and for the most recent information, please take a look at the following sources:

- The [website](#) of your programme: for the schedule (including changes) and all kinds of other practical information about the programme
- Utrecht University [Course Catalogue](#) for extensive course descriptions of your own and other study programmes
- Course manuals of individual programmes, with detailed information about content, requirements, exams, calculation of final grade, and so on. These are available two weeks prior to the start of the course.
- Blackboard: practically every course has an electronic learning environment and the programme GSS as a whole has a community with a lot of (practical) information.

However, there may also be questions of a more personal nature or questions with regard to your study progress. For such questions, please contact the study advisor or your tutor.

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

Dr Margien Bootsma, Programme Leader Global Sustainability Science

and

Prof Dr Stefan Dekker, Director of Education Copernicus Institute of Sustainable Development

## 1 CONTENT OF THE PROGRAMME

### 1.1 INTRODUCTION

Since the global environmental conferences in Rio de Janeiro (1992), Johannesburg (2002) and again in Rio de Janeiro (2012), sustainable development has become an internationally recognized principle that most nations have now committed themselves to. At the United Nations Sustainable Development Summit on 25 September 2015, world leaders adopted the 2030 Agenda for Sustainable Development. This Agenda includes a set of 17 Sustainable Development Goals to end poverty, fight inequality and injustice, and tackle climate change by 2030.

Sustainable development is the expression of a desire to attune economic and social development to the carrying capacity of the physical environment everywhere on Earth, now and in the future. The main ways to achieve this goal are by shifting from fossil fuel-based energy towards renewable energy, recycling materials, using natural resources prudently, making production and consumption patterns more environmentally accountable, paying attention to the quality of the built environment, and conserving and restoring remaining natural habitats, while rethinking socio-economic structures.

Sustainability Science is an emerging field of research dealing with the interactions between natural and social systems, and with how these 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. In other words, sustainability is about the relationship between the current needs of humans and the development of these needs for future generations, while taking into account the vulnerability of socio-economic and natural systems as well as the ability of these systems to adapt to inherently abrupt changes. In order to achieve a transition towards a sustainable society, it is necessary to acquire and further develop knowledge about the dynamics of the Earth's natural and socio-economic systems, and, most importantly, knowledge about the interactions between these systems, on a global, regional and local scale.

### 1.2 AIM AND GENERAL SET-UP OF THE PROGRAMME

The Global Sustainability Science programme aims to educate academics such that they acquire the knowledge, skills and attitudes that enable them to analyse, understand and find solutions for complex sustainability challenges, and to successfully engage in multidisciplinary and interdisciplinary cooperation. Within the programme, sustainability is studied from a systems analysis perspective. Interacting natural and socio-economic systems are inherently dynamic and are constantly subject to change. The systems analysis perspective can be helpful in the analysis of the vulnerability and resilience of natural and socio-economic systems.

This is translated into a degree programme in which sustainability challenges are studied from the following three perspectives:

1. *A general multidisciplinary, systems analysis perspective*, which focuses on developing knowledge and skills related to natural scientific and social scientific aspects of sustainability. This general perspective is mainly addressed in compulsory major core courses.
2. *An in-depth multidisciplinary perspective*, which focuses on a thematic application field within sustainability science. This perspective can be found in the major optional courses. Students choose one of four tracks: (i) *Climate, Water & Ecosystems*, (ii) *Energy & Resources*, (iii) *Governance & Societal transformation* and (iv) *Business & Innovation*.
3. *An integrating perspective*, which is aimed at developing the skills and attitude for interdisciplinary cooperation, and which becomes clear in the integration projects in Years 1, 2 and 3.

## 1.3 INTENDED LEARNING OUTCOMES

### 1.3.1 GENERAL INTENDED LEARNING OUTCOMES

Graduates with a BSc degree in Global Sustainability Science:

- can acquire, interpret and conceptualise knowledge;
- can analyse, organise and synthesise information;
- are capable of logical reasoning, argumentation, and analytical and critical thinking;
- are able to apply methods and techniques scientifically that they have learned for solving problems;
- are able to independently keep up with developments and new knowledge in their discipline;
- are capable of placing their knowledge and understanding in a broader scientific and social context;
- are able to transfer scientific information to both peers and non-peers;
- have substantial understanding of research in the field;
- have the necessary learning capacities for further (university) education;
- have a reflective attitude towards their own performance, development and career.

### 1.3.2 DOMAIN-SPECIFIC LEARNING OUTCOMES

#### **Knowledge:**

Graduates with a BSc degree in Global Sustainability Science have:

- a basic knowledge and understanding of the nature, scope and causes of sustainability challenges at different spatial and temporal scales and of their underlying scientific concepts;
- a basic knowledge and understanding of current and innovative solution strategies for sustainability challenges at different spatial and temporal scales;
- a basic knowledge and understanding of physical, chemical and biological processes in natural systems, of social and economic processes in societal systems, and of the interactions between natural and societal systems leading to sustainability challenges;
- knowledge of the multidisciplinary character of sustainability challenges, of theories and methods in sustainability research, and of the possibilities and limitations of multidisciplinary research;
- specific knowledge of theories and methodologies regarding one of the following subdomains of sustainability science: *Water, Climate & Ecosystems, Energy & Resources, Governance & Societal Transformation, and Business & Innovation*;
- an understanding of the complex societal transformation processes related to sustainable development and are capable of distinguishing, interpreting and assessing the effectiveness of different relevant intervention strategies (based in the natural sciences or the social sciences).

#### **Skills:**

Graduates with a BSc degree in Global Sustainability Science are capable of scientifically:

- applying the acquired knowledge and understanding for analysing and solving sustainability challenges at different spatial and temporal scales
- formulating (simple) research questions, hypotheses, and explanations from observations, of applying models to test hypotheses, and of applying methods and techniques for sustainability research;

- designing sustainability research and of making an informed choice for quantitative and/or qualitative methods;
- conducting empirical research using natural scientific and/or social scientific techniques, of processing, analysing, interrelating, interpreting and modelling the collected data, and of presenting the research results in writing in a suitable form (for instance by using maps or graphs);
- exploring the relevant scientific sustainability literature and information, and of critically examining, analysing and evaluating the information;
- cooperating as a sustainability specialist in multidisciplinary teams with specialists from other disciplines, and are able to confront and integrate notions and approaches from the different disciplines in these multidisciplinary teams;
- producing written papers and oral presentations on sustainability science in English, using appropriate presentation techniques, and geared towards a specific audience;
- reformulating a practical question or problem related to sustainability science into a clear and researchable problem statement, of operationalising associated concepts in an adequate way, of analysing a subject theoretically as well as empirically, of presenting the results in a coherent discourse that concludes with a clear and synthesising conclusion, of using the results for answering the practical question or for contributing to the clarification and if possible the resolution of the problem, of developing a position that is partly based on balancing relevant societal, scientific or ethical aspects.

**Attitude:**

Graduates with a BSc degree in Global Sustainability Science show:

- a scientific attitude when describing, explaining and predicting phenomena (objective, critical, fair, etc.);
- a professional working attitude;
- an awareness of the impact and consequences that human activities have on sustainability systems and of the necessity for ethically responsible and sustainable management of the Earth's systems.

## 1.4 DESCRIPTION OF THE CURRICULUM

### 1.4.1 OVERVIEW

The three-year Global Sustainability Science programme amounts to 180 EC<sup>1</sup> (European credits) and consists of a major of 135 EC and the elective course profile of 45 EC. The major Global Sustainability Science consists of compulsory core courses (75 EC) and major elective courses (60 EC).

In the elective course profile, a student can not only attend academic course modules selected from the total range of course modules that are offered at Utrecht University, but also – after approval by the Board of Examiners – academic course modules from outside Utrecht University. If a student selects a coherent package of course modules, offered and approved by another teaching institute of the University, this is called a minor.

One academic year comprises 60 EC and consists of four course periods of 10 weeks each. The standard size of a course module is 7.5 EC, except for the Bachelor's thesis, which is 15 EC.

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<sup>1</sup> 1 EC corresponds to 28 hours of study.

Course modules are taught at three levels: level 1 introduces basic concepts within sustainability science; level 2 provides further insight into research areas and methods; and level 3 is an advanced Bachelor's level that synthesizes and integrates knowledge. In general, each level corresponds to the year of study in which the course modules are taught.

Academic skills are trained on three levels, which are parallel to the knowledge levels. Training of skills is integrated in all courses in the programme, starting with a series of eight workshops on Academic Writing and Presenting in the course *Sustainability Challenges*.

<b>Bachelor year 1</b>	
Compulsory major core courses	45 EC
Major elective courses	7.5 EC
Elective course profile	7.5 EC

<b>Bachelor year 2</b>	
Compulsory major core courses	22.5 EC
Major elective courses	15 EC
Elective course profile	22.5 EC

<b>Bachelor year 3</b>	
Compulsory major core courses	7.5 EC
Major elective courses	37.5 EC
Elective course profile	15 EC

**Table 1 Overview of curriculum components**

The basic set-up of the major includes four main course streams:

- Introductory sustainability science courses (compulsory major core courses Year 1)
- Research methods courses (compulsory major core courses Years 1 and 2)
- Courses related to a thematic sustainability domain (major elective track courses Years 1, 2, 3)
- Integration courses (integration projects) and the Bachelor's thesis (compulsory major courses Years 1, 2, 3, major elective track course Year 3)

These four main course streams are discussed in more detail below.

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#### 1.4.2 COMPULSORY MAJOR CORE COURSES

The compulsory courses of the programme provide students with the necessary background knowledge in sustainability science, a thorough training in research methods and techniques to further develop their analytical skills, and integration projects in which students apply their knowledge and analytical skills to sustainability problems.

##### Introductory sustainability science courses

The first semester of Year 1 starts with three courses that together offer a broad introduction into sustainability science. The *Sustainability Challenges* course provides an interdisciplinary exploration of the major challenges that sustainable development seeks to address, for example population growth; energy, food and water supply; and urban and economic development. In addition, the course explores historical and current global debates on sustainable development as well as innovative solutions. *Sustainability Challenges* includes workshops on Academic Writing and Presenting and a first group project.

In the second course period, the *Natural Processes* course addresses physical, chemical, biological and geological processes in the environment, including global biogeochemical cycles (carbon, nitrogen and phosphorus) and hydrological cycles.

In the same course period, *Foundations of Social Sciences for Sustainability* addresses the question how social and economic processes can cause sustainability problems but also contribute to their solution, for example by means of market-based instruments (such as setting up markets for emissions or ecosystem services) and regulations (government and self-imposed).

##### Research methods courses

The *Mathematics and Systems Analysis* course in the first period of Year 1 introduces the systems analysis approach that is central to the programme. This course addresses mathematical, quantitative modelling and qualitative methods used to describe, understand and model complex systems such as ecosystems, businesses and societal systems.

At the end of Year 1 (Period 4), students learn how to conduct empirical scientific research in the course *Research Skills GSS*. This course includes designing empirical research, developing a research proposal, selecting methods for data collection and data analysis, and writing research reports. Another important component of this course is scientific integrity.

In Year 2, the *Statistics* course familiarises students with methods to analyse quantitative and qualitative empirical scientific data, with an emphasis on a range of statistical methods.

Finally, the second-year course *Philosophy of Science and Ethics* discusses questions such as how does science work and what is the difference between scientific and pseudo-scientific knowledge? In this course students learn about important philosophers and environmental ethics, by reflecting on moral issues that consider the relationship between humans and nature / environment.

##### Integration projects

The first year concludes with the *Regional Integration Project*, which is an interdisciplinary group research project on regional sustainability challenges. This course includes the use of GIS and a multidisciplinary field study on the island of Texel, during which data collection methods are practised, such as interviewing, and sampling of water, soil, air and vegetation. In this project, we cooperate with the municipality of Texel and a local NGO.

Year 2 concludes with the *Global Integration Project*.

This course focuses on the challenges of achieving the Sustainable Development Goals (SDGs) and the targets that are attached to them, and on understanding the challenges and possibilities of moving from global goals to action. The course will feature lectures by key researchers and practitioners close to the SDG process. Students will focus on writing a case study report to the United Nations Environment programme (an actual partner in the course) on how to achieve a specific Sustainable Development Goal and on how this goal relates to other SDGs. Students will also work together with policy actors from around 45 different countries globally to develop integrated national-level reports on the SDGs. This process involves intense collaboration between all students across SDGs and country projects; the course also includes a policy excursion.

The *Consultancy Project* (Year 3) is an interdisciplinary group research project for an actual client, for example an NGO, Utrecht University or the Province of Utrecht. Students act as consultants, advising their clients on an existing sustainability issue. In the *Consultancy Project*, students put into practice all the knowledge and skills that they have gained during the entire programme.

Level	Course name	Study load in EC
1	Sustainability Challenges (GEO1-2410)	7.5
	Mathematics and Systems Analysis GSS (GEO1-2411)	7.5
	Natural Processes (GEO1-2412)	7.5
	Foundations of Social Sciences for Sustainability (GEO1-2413)	7.5
	Research Skills GSS (GEO1-2415)	7.5
	Regional Integration Project (GEO1-2416)	7.5
2	Statistics (GEO2-2217)	7.5
	Philosophy of Science and Ethics (GEO2-2142)	7.5
	Global Integration Project (GEO2-2417)	7.5
3	Consultancy Project (GEO3-2423)	7.5

**Table 2 Compulsory major core courses**

Entry requirements may be set for each course, which means that a detailed description is given of the preliminary knowledge that is required for the course. Table 8 presents a complete overview. The entry requirements are also mentioned in the course descriptions in this prospectus. For a few courses it is assumed students have certain preliminary knowledge; however, such assumptions do not constitute strict entry requirements.

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### 1.4.3 TRACKS (MAJOR ELECTIVE COURSES)

Next to the compulsory major courses (75 EC), the major Global Sustainability Science consists of major elective courses (60 EC). The major elective courses are organised in four tracks. At the end of the first year, students will deepen and extend their knowledge by choosing one of four tracks, and this allows them to focus on themes that really interest them and that match their talents.

The four tracks are closely linked both to sustainability challenges and to the research conducted at the Copernicus Institute of Sustainable Development. They are:

- Water, Climate & Ecosystems
- Energy & Resources
- Governance & Societal Transformation
- Business & Innovation

The programme of each of these tracks consists of:

- A disciplinary introductory course (level 1)
- Two courses to improve knowledge (level 2)
- Three integrative courses (three courses are chosen from five level 3 courses)
- A Bachelor's thesis (level 3).

All tracks include a combination of natural science, social science and interdisciplinary (combined natural and social science) courses. However, the balance between these three types of courses differs between the tracks (Table 3).

Track	Natural science courses	Social science courses	Interdisciplinary courses
<i>Water, Climate &amp; Ecosystems</i>	45%	10%	45%
<i>Energy &amp; Resources</i>	50%	10%	40%
<i>Governance &amp; Societal Transformation</i>	20%	30%	50%
<i>Business &amp; Innovation</i>	25%	40%	35%

**Table 3** Division per track of natural science courses, social science courses and interdisciplinary courses

Major elective courses may also have entry requirements (see course descriptions and Table 8). Some courses have a maximum number of participants or participation is limited in other ways. This is mentioned in the course description.

### 1.4.3.1 WATER, CLIMATE & ECOSYSTEMS

The track *Water, Climate & Ecosystems* focuses on the consequences of climate and land use change for humans, animals and plants. The challenge here is to understand the impacts of changing nutrient and water cycles and how adverse effects can be dealt with. This track deals extensively with the processes within natural systems (soil, plant, water and atmosphere) and the interaction between these processes and systems. Moreover, the focus is on learning how to research and model the interaction between ecosystems, humans and animals, and how to model the nutrient and water cycle. Finally, students learn how to apply this knowledge with a view to developing sustainable solutions for water management, natural-area management and restoration, and the use of land for different purposes, such as agriculture or energy-crop cultivation.

Level	Course name	Study load in EC
1	Chemistry and the Environment	7.5
2	Global Climate Change	7.5
	Ecohydrology	7.5
3 3 out of 5	Integrated Water and Soil Management	7.5
	Landscape Ecology and Nature Conservation	7.5
	Environmental Impact Assessment	7.5
	Land Change Science	7.5
	Environmental Chemistry and Health	7.5
3	BSc thesis Water, Climate & Ecosystems	15

**Table 4** Water, Climate and Ecosystems track

The level 1 and level 2 courses in this track provide the natural scientific knowledge base. In the *Chemistry and the Environment* course (level 1), the main, sustainability-related, chemical processes in natural systems are discussed, including CO<sub>2</sub> uptake and acidification in oceans, chemical equilibrium and reduction-oxidation reactions, dissolution-precipitation reactions, surface sorption, thermodynamics and reaction kinetics.

In the *Global Climate Change* course (level 2), students learn about the different components of the earth climate system, including the physical and chemical processes and feedback mechanisms. The past, present and future global changes are studied, including IPCC scenarios, modelling, policy and human behaviour.

The *Ecohydrology* course (level 2) studies the interactions between ecosystems and humans, and the global, regional and local hydrological cycle. This course also includes ecohydrological fieldwork and modelling.

In Year 3 (level 3), students select three of the following five courses:

The *Integrated Water and Soil Management* course addresses important concepts, including the water footprint and current as well as future global water-related sustainability problems, such as water availability in

developing countries. For this, students use the principles and history of active soil management and integrated water management, including modelling of water and soil systems.

The *Landscape Ecology and Nature Conservation* course introduces the essential ecological principles and concepts at its different aggregation levels, from individual organism to ecosystem, and highlights how these concepts and principles underlie global sustainability challenges and how an understanding of ecology can contribute to solving these challenges. The course covers a broad diversity of challenges, ranging from the sixth extinction to ecological restoration and management of overabundant populations. The course will draw on examples from both the global North and the global South.

*Environmental Impact Assessment (EIA)* has been incorporated into worldwide environmental legislation since the 1990s. It implies that human actions with environmental consequences need to be evaluated in advance in a procedure that quantifies the environmental impacts of the action. In Europe, the Strategic Environmental Assessment (SEA) has been embraced as a new tool for incorporating environmental concerns into the highest levels of decision-making. The *Environmental Impact Assessment* course introduces the procedures and policies in EIA and SEA, their practical value, the methods for predicting the effects of changes in the environment, and the latest national and international developments. It also critically reflects on the EIA and SEA instruments.

The *Land Change Science* course focuses on modelling the consequences of land use change (for example for the production of biofuels) on water availability and water quality, regional and global biodiversity, and global energy production (CO<sub>2</sub> emission). Students learn how to apply GIS and Remote Sensing techniques in relation to sustainability challenges.

People are exposed to environmental risk factors in their homes, work places and communities through for example indoor and outdoor air pollution, climate change, noise, agricultural practices, and inadequate water quality and sanitation. In the course *Environmental Chemistry and Health* students will learn about the relation between Environmental Chemistry, Environmental Toxicology and Environmental Health. The course covers the complete chain from occurrence and behaviour of harmful and beneficial substances in the environment (speciation, transformation and transport), their bioavailability, uptake, metabolism and clearance by organisms and their adverse health effects.

The *Bachelor's thesis Water, Climate & Ecosystems* (15 EC) is the final assignment of the Bachelor's programme. In this individual research project, students apply the knowledge gained on sustainability challenges, solutions and research methods in the field of *Water, Climate & Ecosystems*. The Bachelor's thesis is used to assess the ability to plan, execute, report and present a research project.

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#### 1.4.3.2 ENERGY & RESOURCES

The transition to a sustainable use of energy and resources lies at the centre of this track. The energy transition away from fossil fuels and towards a fully decarbonized economy will present tremendous challenges in the coming decades, specifically regarding changes in the production and use of energy and resources. To understand the possibilities and limitations of our current and possible future energy system, students will need to have knowledge of physical and thermodynamic processes. They will also learn how all the components of our climate system interact. In the third year, students will elaborate on this knowledge by deepening their understanding of (1) methods of analysing energy production and use, (2) the impact of product life cycles (from raw material to production to waste), and (3) the possibilities of achieving an overall sustainable use of resources and sustainable energy sources such as wind, water, solar and biomass.

Level	Course name	Study load in EC
1	Science of Energy Technologies	7.5
2	Applied Thermodynamics and Energy Conversions	7.5
	Global Climate Change	7.5
3 3 out of 5	Energy Analysis	7.5
	Life Cycle Assessment	7.5
	Sustainable Resource Use	7.5
	Sustainable Energy Supply	7.5
	Land Change Science	7.5
3	BSc thesis Energy & Resources	15

**Table 5 Energy & Resources track**

The level 1 and level 2 courses in this track provide the natural scientific knowledge base. The course *Science of Energy Technologies* (level 1) addresses the main, sustainability-related, scientific and engineering laws and principles of different energy technologies.

The *Applied Thermodynamics and Energy Conversions* course (level 2) focuses on conversions, especially of chemical energy stored in the form of fossil or renewable fuels to useful forms of energy for satisfying human needs (work, electricity and heat). Special attention will be paid to understanding the factors/parameters that influence the performance and applicability of energy conversion technologies and where and to what extent these can be improved by technological innovations.

In the *Global Climate Change* course (level 2), students learn about the different components of the Earth's climate system, including the physical and chemical processes and feedback mechanisms. Subjects include past, present and future global change, including IPCC scenarios, modelling, policy and human behaviour.

In Year 3 (level 3), students select three of the following five courses:

*Energy Analysis*: The energy system is a complex system with demand and supply, which includes an energy market that connects both. In this course, students learn about methods and tools to analyze the energy systems. This includes the analysis of energy chains, energy efficiency, energy-saving potentials and energy scenarios.

The *Life Cycle Assessment* (LCA) course deals with methods used to assess the environmental impact of products from a life cycle perspective, starting from resource extraction and ending with waste management. In addition, the course focuses on recent developments in LCA methodology, applying LCA using modern computer tools and critically reviewing existing LCA studies.

The *Sustainable Resource Use* course focusses on different kinds of resources, their use for different applications and sustainability impacts. A deeper investigation of resource production and consumption is important because of the elemental role resources have played in historical development of humankind, our current lifestyles and the current state of the environment. The course also addresses methods and tools to assess resource use and impacts at different scales (e.g. material flow analysis of a company and how

technological innovation can change the flows), approaches for achieving more sustainable resource use through governance stimulated innovation (e.g. top-runner approaches in economic sectors), and perspectives of different stakeholders on what constitutes sustainable resource use (e.g. consumers, producers, NGOs, governments).

In the *Sustainable Energy Supply* course, students learn about the historical, current and future roles of renewables in the energy mix; about the physical principles and supply potential of renewable energy sources (wind, solar, water, geothermal, biomass); and about the deployment potential of renewable energy technologies.

The *Land Change Science* course focuses on modelling the consequences of land use change (for example for the production of biofuels) on water availability and water quality, regional and global biodiversity, and global energy production (CO<sub>2</sub> emission). Students learn how to apply GIS and Remote Sensing techniques in relation to sustainability challenges.

The final assignment of the Bachelor's programme is the *Bachelor's thesis Energy & Resources* (15 EC). In this individual research project, students apply the knowledge they have gained on sustainability challenges and solutions and research methods in the field of Energy & Resources. The Bachelor's thesis is used to assess the ability to plan, carry out, report and present a research project.

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#### 1.4.3.3 GOVERNANCE & SOCIETAL TRANSFORMATION

The track Governance & Societal Transformation addresses the challenges of how to change governance, societal and economic institutions in order to stimulate sustainable development. This track focuses on the societal origins of sustainability issues, the transformations that are needed to make society more sustainable, and the strategies required to achieve this objective. This involves examining the role of government, international organisations, companies, social organisations and citizens. In the first and second year, students learn how to examine and evaluate the international political and administrative processes related to sustainability issues as well as the (stimulating or impeding) role played in societal transformations by national and international legal frameworks. In the third year, students deepen their understanding of specific sustainability areas, such as multifunctional land use, water and nature management, and energy supply.

Level	Course name	Study load in EC
1	Politics of the Earth	7.5
2	Policy Evaluation and Design	7.5
	Environmental Law	7.5
3 3 out of 5	Sustainable Land Use	7.5
	Integrated Water and Soil Management	7.5
	Landscape Ecology and Nature Conservation	7.5
	Environmental Impact Assessment	7.5
	Sustainable Energy Supply	7.5
3	BSc thesis Governance & Societal Transformation	15

**Table 6 Governance & Societal Transformation track**

The level 1 and level 2 courses in this track provide the social scientific knowledge base.

*Politics of the Earth* (level 1): In a nutshell, political processes determine who gets what. Political actors decide how problems are framed, and subsequently how policy resources will be allocated – e.g. by means of the application of policy instruments. In this course, students learn how to analyse political and governance processes with specific regard to sustainability challenges.

The *Policy Evaluation and Design* course (level 2) focuses on methods for the analysis, evaluation and design of policies for sustainable development.

Rules and regulations are often at the core of sustainability challenges. In the *Environmental Law* course (level 2), students learn about the legal aspects that affect problems and solutions related to our use of the environment. Given that environmental problems often transcend borders, international law (e.g. EU) will be the focus of this course.

In Year 3 (level 3), students select three of the following five courses:

The *Sustainable Land Use* course focuses on how governments, private actors and civil organizations can contribute to achieving a sustainable distribution of different land use functions, regarding ‘blue’ infrastructure (water, water safety), ‘green’ infrastructure (nature and landscape) and ‘red/grey’ infrastructure (housing, working, transportation).

The *Integrated Water and Soil Management* course addresses important concepts such as the water footprint and current as well as future global water-related sustainability problems such as water availability in developing countries. For this, students use the principles and history of active soil management and integrated water management, including modelling of water and soil systems.

The *Landscape Ecology and Nature Conservation* course introduces the essential ecological principles and concepts at its different aggregation levels, from individual organism to ecosystem, and highlights how these concepts and principles underlie global sustainability challenges and how an understanding of ecology can contribute to solving these challenges. The course covers a broad diversity of challenges, ranging from the sixth extinction to ecological restoration and management of overabundant populations. The course will draw on examples from both the global North and the global South.

*Environmental Impact Assessment* (EIA) has been incorporated into worldwide environmental legislation since the 1990s. It implies that human actions with environmental consequences need to be evaluated in advance in a procedure that quantifies the environmental impacts of the action. In Europe, the Strategic Environmental Assessment (SEA) has been embraced as a new tool for incorporating environmental concerns into the highest levels of decision-making. The *Environmental Impact Assessment* course introduces the procedures and policies in EIA and SEA, their practical value, the methods for predicting the effects of changes in the environment, and the latest national and international developments. It also critically reflects on the EIA and SEA instruments.

In the *Sustainable Energy Supply* course, students learn about the historical, current and future role of renewables in the energy mix; about the physical principles and supply potential of renewable energy sources (wind, solar, water, geothermal, biomass); and about the deployment potential of renewable energy technologies.

The final assignment of the Bachelor's programme is the *Bachelor's thesis Governance & Societal Transformation* (15 EC). In this individual research project, students apply the knowledge they have gained on sustainability challenges and solutions as well as research methods in the field of *Governance & Societal Transformation*. The Bachelor's thesis is used to assess the ability to plan, carry out, report and present a research project.

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#### 1.4.3.4 BUSINESS & INNOVATION

The track *Business & Innovation* addresses the challenge of how to make our production systems more sustainable, based on innovative technologies and business models. Technological development and innovation are important for solving a number of sustainability issues. Organisations play a key role in this, as they not only contribute to the development of innovative solutions, but also have an impact on the environment themselves. Organisations and innovation, in a sustainability context, are the core of the track *Business & Innovation*. Students obtain insight into technology, into innovation and innovation processes, into different types of organisations, into the key organisational processes, and into the part played by an organisation's environment. They also learn how technology and innovation affect the economy. In the third year, students build on this knowledge by deepening their understanding of sustainable entrepreneurship and of actions that companies can undertake to ensure that innovations are produced. Students learn methods to analyse energy-production and energy-use cycles and the impact of product life cycles (from raw material to production to waste). They also undertake an in-depth study of the possible ways that organisations can use resources sustainably.

Level	Course name	Study load in EC
1	Principles of Economics	7.5
2	Organisation and Innovation	7.5
	Economics of Innovation	7.5
3 3 out of 5	Business, Sustainability and Innovation	7.5
	Life Cycle Assessment	7.5
	Sustainable Resource Use	7.5
	Innovation Strategies of Firms and Entrepreneurs	7.5
	Energy Analysis	7.5
3	BSc thesis Business & Innovation	15

**Table 7 Business & Innovation track**

The level 1 and level 2 courses in this track provide the social scientific and economic knowledge base. In the *Principles of Economics* course (level 1), students learn about the most fundamental principles of modern economies and economic thinking. Topics in microeconomics, macroeconomics and international economics will be covered. The different concepts, models and analytical tools acquired in class help students in understanding economic processes at different levels of aggregation.

The *Organisation and Innovation* course (level 2) focuses on types of organisations, the relationship between organisation structures, organisation processes and sustainable innovation and the role of the organisational environment in the context of innovation and sustainability.

The *Economics of Innovation* course (level 2) introduces evolutionary economics: how does an economy change and in what way are these changes driven and influenced by technology and innovation? Students learn about these changes at different levels: the level of firms, the level of inert-organizational relationships between firms, the level of industries, and the level of the global economy.

In Year 3 (level 3), students select three of the following five courses:

In the *Business, Sustainability and Innovation* course students learn about concepts, tools and techniques available to companies as well as about initiatives taken by companies to better contribute to sustainability. In addition, they learn to reflect critically on the implementation of these concepts and tools. Students also perform an authentic case study for an existing company.

The *Life Cycle Assessment (LCA)* course deals with methods used to assess the environmental impact of products from a life cycle perspective, starting from resource extraction and ending with waste management. In addition, the course focuses on recent developments in LCA methodology, applying LCA using modern computer tools and critically reviewing existing LCA studies.

The *Sustainable Resource Use* course focusses on different kinds of resources, their use for different applications and sustainability impacts. A deeper investigation of resource production and consumption is important because of the elemental role resources have played in the historical development of humankind, our current lifestyles and the current state of the environment. The course also addresses methods and tools to assess resource use and impacts at different scales (e.g. material flow analysis of a company and how technological innovation can change the flows), approaches for achieving more sustainable resource use through governance stimulated innovation (e.g. top-runner approaches in economic sectors), and perspectives of different stakeholders on what constitutes sustainable resource use (e.g. consumers, producers, NGOs, governments).

In the *Innovation Strategies of Firms and Entrepreneurs* course, students study theories and models of innovation management to analyse innovation management in practice, including integrated dynamic process models of innovation by individual organizations.

*Energy Analysis*: The energy system is a complex system with demand and supply, which includes an energy market that connects both. In this course, students learn about methods and tools to analyse the energy systems. This includes the analysis of energy chains, energy efficiency, energy-saving potentials and energy scenarios.

The final assignment of the Bachelor's programme is the *Bachelor's thesis Business & Innovation* (15 EC). In this individual research project, students apply the knowledge they have gained on sustainability challenges and solutions as well as research methods in the field of Business & Innovation. The Bachelor's thesis is used to assess the ability to plan, carry out, report and present a research project.

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#### 1.4.4 ENTRANCE REQUIREMENTS, ASSUMED PREVIOUS KNOWLEDGE AND OTHER RESTRICTIONS GSS COURSES

Some courses in the GSS programme require prior knowledge, to be gained by passing or at least attending certain previous GSS-courses. In the table 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 take priority.

Course	Entrance requirements
Regional Integration Project (GEO1-2416)	Passed Research Skills GSS (GEO1-2415). Or: Research Skills GSS (GEO1-2415) must be followed parallel to Regional Integration Project (GEO1-2416).
Milieu, Gedrag en Communicatie (GEO2-2116)	At least 45 EC gained.
Global Climate Change (GEO2-2143)	Wiskunde- en Systeemanalyse (GEO1-2202) or Mathematics & Systems Analysis (GEO1-2411) or Wiskunde voor Aardwetenschappers (GEO1-1103) or Voortgezette Wiskunde/Fysica (GEO1-1121) or Systeembioogie (B-B1SYSB09) or Kwantitatieve biologie (B-B1KWBI20) or a comparable course
Statistics (GEO2-2428)	Participated fully in Research skills GSS (GEO1-2415) or Onderzoeksvaardigheden IW (GEO1-2204)

Course	Entrance requirements
Global Integration Project (GEO2-2417)	Passed Research skills GSS (GEO1-2415) and Regional Integration Project (GEO1-2416). Participated fully in Statistics (GEO2-2428 or GEO2-2217)
The Sustainability Game (GEO2-2425)	At least 45 EC gained
Futuring for Sustainability (GEO2-2427)	At least 45 EC gained
Business, Sustainability and Innovation (GEO3-2122)	At least 90 EC gained
Innovation Strategies of Firms and Entrepreneurs (GEO3-2221)	At least 90 EC gained
Sustainable Land Use (GEO3-2121)	At least 60 EC gained and knowledge of Politics of the Earth (GEO1-2414) and Policy evaluation and Design (GEO2-2113)
Bachelor's thesis GSS (GEO3-2422)	Passed all major obligatory courses GSS apart from Consultancy Project (GEO3-2423); Participated fully in Consultancy Project (GEO3-2423); Passed all track courses of the student's chosen track on level 1 and 2; Passed at least 1 track course of the student's chosen track on level 3.
Consultancy Project (GEO3-2423)	At least 90 EC gained in the major GSS, amongst which: <ul style="list-style-type: none"> <li>- Sustainability Challenges (GEO1-2410), and</li> <li>- Regional Integration Project (GEO1-2416), and</li> <li>- Global Integration Project (GEO2-2417)</li> </ul>
Tailor-made course GSS (GEO3-2426)	Passed all major GSS obligatory courses of year 1; Passed at least one GSS major elective course of year 1; <ul style="list-style-type: none"> <li>• Little to no study delay.</li> <li>• The course can only be taken if a lecturer from the GSS programme can be found to supervise the student (depends a.o. on available time, expertise and field of interest of the lecturer).</li> <li>• Approval received by the lecturers and course coordinator at least 1 month prior to the start of the course.</li> <li>• Execute within a timeframe of no more than two education periods (22 weeks).</li> </ul>

Table 8 Entrance requirements GSS courses

Period	Course	Max. number of students	Other restrictions
1	GEO1-2103: Duurzame Ontwikkeling	-	Not for GSS students. This course cannot be taken in combination with Sustainability Challenges (GEO1-2410)
1	GEO2-2113: Policy Evaluation & Design	-	Only open for GSS, LAS-SEG, LAS-GSD, LAS-DO, LAS-MMW and minor GSD
3	GEO2-2116: Milieu, Gedrag en Communicatie	60	

Period	Course	Max. number of students	Other restrictions
4	GEO2-2131: Ecohydrology	-	Only open for GSS, LAS-WCE, LAS-DO and minor WCE.
2/4	GEO2-2142: Philosophy of Science & Ethics	Period 4: 120	
2	GEO3-2121: Sustainable Land Use	-	Only open for GSS, NW&I, minor GSD, LAS-GSD, LAS-MMW and LAS-DO
2	GEO3-2119: Env. Chemistry and Health	-	Only open for GSS, NW&I and minor WCE. No exchange students
1	GEO3-2122: Business, Sustainability & Innovation	-	Only open for NWI, GSS, LAS-DOI, LAS-DO and minors DO and DOI; no exchange students
2	GEO3-2133: Integrated Water & Soil Mgt	-	Only open for GSS, LAS-WCE, LAS-DO and minor WCE
1	GEO3-2140: Landscape Ecology and Nature Conservation	-	Only open for GSS, LAS-WCE, LAS-DO and minor WCE
1	GEO1-2202: Wiskunde & Systeem Analyse	-	Only open for NW&I, LAS-IW and minor WCE.  This course cannot be taken if GEO1-2411 has already been passed.
2	GEO1-2204: Onderzoeks-vaardigheden IW	-	Only open for NW&I, LAS-DOI, LAS-IW, premaster NW&I. This course cannot be taken in combination with Research Skills GSS (GEO1-2415).
3	GEO1-2207: Moleculaire Celbiologie en Genetica	-	Only open for NW&I
4	GEO1-2210: Humane Biologie	-	Only open for NW&I and LAS-IW
3	GEO1-2255: Principles of Economics	-	Only open for NW&I, LAS-DOI and GSS; no exchange students
3	GEO2-2217: Statistics NW&I	-	Only open for NW&I, LAS-IW, premaster NW&I
4	GEO2-2273: Innovatieproject 1	-	Only open for NW&I
4	GEO2-2271: Technologiebeoordeling- en evaluatie	-	Only open for NW&I

Period	Course	Max. number of students	Other restrictions
2	GEO2-2274: Science, Technology & Society	-	Only open for NW&I, GSS-B&I, LAS and minor IW
1	GEO3-2221: ISFE	-	Only open for NWI, GSS, LAS-DOI, LAS-DO, LAS-IW, LAS-NWI and minor IW; no exchange students
3	GEO3-2226: Innovatieproject 2	-	Only open for NW&I
-	GEO3-2267: Module op Maat	-	Only open for NW&I
4	GEO3-2275: thesis NW&I (15 EC)	-	Only open for NW&I cohort 2015 and later, LAS-IW and LAS-DOI
4	GEO3-2276: Digital Innovation	-	Only open for NW&I, GSS and minors IW and DOI
1	GEO1-2410: Sustainability Challenges	-	Only open for GSS. This course cannot be taken in combination with Duurzame Ontwikkeling (GEO1-2103)
1	GEO1-2411: Mathematics and Systems Analysis	-	Only open for GSS, LAS-DO and minor WCE. This course cannot be taken if GEO1-2202 has already been passed.
2	GEO1-2412: Natural Processes	-	Only open for GSS, LAS-SE, LAS-WCE, LAS-DO and LAS-DOI.
2	GEO1-2413: Foundations of Social Sciences for Sustainability	-	Only open for GSS, LAS-GSD, LAS-DO and minor GSD. For LAS-MMW: only if Milieusociologie (GEO2-2139) has been followed before but not passed.
3	GEO1-2414: Politics of the Earth	-	Only open for GSS, SGPL, LAS-GSD, LAS-DO, LAS-MMW, LAS-SEG and minor GSD
4	GEO1-2415: Research skills GSS	-	Only open for GSS, LAS-GSD, LAS-SE, LAS-WCE, LAS-MMW, LAS-E&D and LAS-DO. For LAS: only if OV1 MW (GEO1-2105) has not yet been passed. This course cannot be taken in combination with OV IW (GEO1-2204).
4	GEO1-2416: Regional Integration Project	-	Only open for GSS.
3	GEO2-2006: Inter-University Sustainability Challenge	12	
4	GEO2-2417: Global Integration Project	-	Only open for GSS

Period	Course	Max. number of students	Other restrictions
1	GEO2-2418: Organisation & Innovation	-	Only open for GSS, LAS-DO and minor DOI. This course cannot be taken in combination with Organisation Theories (GEO2-2218) and/or ITI (GEO1-2201).
3	GEO2-2425: The Sustainability Game	20	No exchange students

**Table 9 Other restrictions (GSS and NW&I)**

Minors:

WCE = Water, Climate & Ecosystems  
 SE = Sustainable Energy  
 DOI = Duurzaam Ondernemen en Innovatie  
 GSD = Governance for Sustainable Development  
 IW = Innovatiewetenschappen

LAS majors:

DOI = Duurzaam Ondernemen en Innovatie  
 DO= Duurzame Ontwikkeling  
 E&D = Energie en Duurzaamheid  
 GSD = Governance for Sustainable Development  
 MMW = Milieu-maatschappijwetenschappen  
 IW = Innovatiewetenschappen  
 WCE = Water, Climate & Ecosystems  
 SE = Sustainable Energy  
 SEG = Stadsgeografie en Economische Geografie

Also, please note that some courses cannot be taken due to overlap in content with other (major) courses in GSS. See table 10. If you are in doubt whether you can take a certain elective profiling course, contact the study advisor ([Studyadvisor.sd.bsc@uu.nl](mailto:Studyadvisor.sd.bsc@uu.nl)).

Students that have to take or have passed:	... are excluded from joining:
GEO1-2103	GEO1-2410
GEO1-2410	GEO1-2103
GEO1-2105	GEO1-2204/2415
GEO1-2204	GEO1-2415
GEO1-2415	GEO1-2204
GEO1-2411	GEO1-2202
GEO1-2202	GEO1-2411
GEO2-2418	GEO2-2218
GEO2-2218	GEO2-2418
GEO2-2139	GEO1-2413
GEO3-2124	SK-BCHDO
SK-BCHDO	GEO3-2124

GEO1-2255	ECB1MI
ECB1MI	GEO1-2255
GEO1-2206	GEO1-1122
GEO2-2217	GEO2-2428
GEO2-2428	GEO2-2217

Table 10 Exclusions

#### 1.4.5 ELECTIVE COURSE PROFILE AND MINORS

For the elective course profile, students can choose six courses (45 EC). They are completely to compose their own elective course profile: for this purpose they can choose a minor and/or separate courses that bear little relation to their major, but that contribute to their general knowledge. It is also possible for students to use the elective course profile to follow more courses from their own major and thus focus the curriculum strongly on one discipline. Students who have not yet decided which track they want to choose are strongly advised to take two major elective GSS courses in Year 1, Period 3.

When making this choice, it is important to take into account that some courses are not open to students from other disciplines, and that at least 15 EC of the elective course profile must be from level 2 or level 3 courses.

Table 11 displays elective profiling courses (taught in English or Dutch) that may be of interest to GSS students (in addition to courses from other GSS tracks).

<i>Course code</i>	<i>Course title</i>	<i>Language</i>	<i>Period/slot</i>
GEO2-1207	Geochemical Cycles	English	1C
GEO1-7001	Stad in beweging	Dutch	1AC
GEO1-7002	Strijd om de ruimte	Dutch	1D
GEO3-2266	Sustainability, Health and Innovation	English	1C
GEO2-4203	Physical Hydrology	English	1B
GEO1-2208	Innovation Systems	English	2A
GEO2-3502	Development Geography: Theory & Practice	English	2D
B-B3WBEL09	Wetenschapper in Beleid	Dutch	2AD
GEO3-4301	Soil and Water Contamination	English	2B
GEO2-2274*	Science, Technology & Society*	English	2A
GEO2-2427	Futuring for Sustainability	English	3A
GEO2-1215	Paleontology - fauna	English	3A
GEO2-2116	Milieu, Gedrag en Communicatie	Dutch	3C
GEO2-2006	Inter-university sust. challenge	English	3C
GEO2-4211	Natural Hazards	English	3A
GEO3-2225	Innovation Policy	English	3A
202000024	Thematic Interdisciplinary Challenge	English	3AD
GEO3-4308	Hands on GIS	English	3B / 4D

GEO2-2425	The Sustainability Game **	English	3C
GEO3-2276	Digital Innovation	English	4A
GEO1-2272	Management E&T Technologieën	Dutch	4D
GEO3-2426	Tailor-made course GSS	Dutch/English	1-2-3-4

**Table 11 Possible elective profiling courses**

\* Only for GSS, track Business & Innovation

\*\* Minimum 18 participants; maximum 36 participants

Please remember that these courses may have entry requirements that need to be satisfied – even for GSS students.

A minor is a coherent set of elective courses worth at least 30 EC, which is part of the elective course profile. Students choose a minor because they are interested in the subject, or because it prepares them for a follow-up study programme (e.g. a Master's programme) or a profession that they are interested in. They can select a minor from one of the other programmes at the Faculty of Geosciences, or from one of the programmes at a different faculty. Students may not follow a minor that is completely or partly composed of courses from their own programme (Global Sustainability Science), as this is their major. More information about minors can be found on the [UU minor website](#).

Although most minor courses are taught in Dutch, some are in English, for example the minor in Entrepreneurship.

#### *The Entrepreneurship minor*

The Entrepreneurship minor has been developed specifically for students who are thinking about starting their own company after graduating. The introductory course for this minor is *Essentials of Entrepreneurship*. Topics include financing, innovation, marketing, logistics and management. The REBO faculty organizes this minor; lecturers from other faculties, including Geosciences, also teach classes.

It is possible that students have completed a degree in higher education before – or part of a degree programme (either at the UU or at a different institution). Under certain circumstances, students may be able to use part of the EC points that they obtained in the elective course profile of the study programme Global Sustainability Science. Students may submit a request to the Board of Examiners ([examencommissie.geo@uu.nl](mailto:examencommissie.geo@uu.nl)). Any correspondence with the Board of Examiners needs to include the student number.

## 1.5 HONOURS EDUCATION

### 1.5.1 GEOSCIENCES HONOURS COLLEGE

The Faculty of Geosciences aims for an ambitious study climate and through the Geosciences Honours College (GHC) it wants to offer high-achieving and motivated students the chance to achieve goals in their academic and personal development that surpass the objectives of the regular Bachelor's programmes. For this reason, it offers honours courses, which are at a higher level and more challenging than those of the regular Bachelor's programmes. The Faculty thus ensures that the potential of high-performing and motivated students is optimally available for both research and society.

In order to allow participating students to develop into excellent geoscientists who are aware of their place and role in society, the GHC is focused on deepening and extending the students' knowledge as well as enhancing

their personal and professional development. Honours students are given great freedom of choice when arranging their personal honours track, and they can follow their own passions in this.

The Geosciences Honours College aims at enabling honours students:

- to reach a more in-depth exploration of the field of their own Bachelor's programme than the exploration that can be achieved in the regular programme;
- to experience a more extensive involvement in the scientific research of their own field than is achieved in the regular programme;
- to gain in-depth insight into the position of their own field within the broader domain of the geosciences;
- to develop personal, social and professional skills appropriate for top geoscientists. This includes showing great initiative, a strong sense of responsibility, creativity, and a large capacity for self-reflection, project and time management, multidisciplinary teamwork and leadership.

Honours students are selected based on grades and motivation. The first selection takes place before the students enter university, in particular during matching events. If students decide to join the GHC even before they enter university, they can immediately start with subjects at honours level in the first semester. However, since many prospective students first want to be sure that they can easily cope with the regular study programme, there is a second moment for selection and entry after the first semester.

Students taking part in the honours programme are expected to finish the regular Bachelor's programme within the allocated time.

The GHC is partly an extra task: in 2.5 – 3 years students are required to obtain 15 extra EC points and to join an international study trip.

The Geosciences Honours College comprises the following elements:

- Honours seminar / Geohouse / Honours conference / Workshops (extra, 15 EC points in total)
- Two optional honours subjects (elective course profile, 15 EC points in total). There is a choice of:
  - Creative challenge project
  - Undergraduate honours research project
  - Tailormade Geosciences honours course
  - One of the courses provided by Descartes College (only in Dutch)
- Honours thesis (additional output)
- Honours option for a minimum of four regular courses during the major (replacement). Participants can find more information about this on Blackboard.
- International Honours study trip (extracurricular).

The Honours seminar and Geohouse include several multidisciplinary and interdisciplinary project groups in which students from different study programmes at the Faculty of Geosciences work together on a common subject. Moreover, the seminar also focuses on skills training (including debating, cooperation and leadership skills) as well as on reflecting on personal ambitions and opportunities.

More information about honours education can be found in the prospectus of the Geosciences Honours College and on the [GSS website](#).

For additional questions about the honours programme, please contact the honours coordinators: [dr. Heleen Mees](#) or [dr. René Verburg](#).

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### 1.5.2 DESCARTES COLLEGE

Students who are motivated and have interests that go beyond the Geosciences can sign up for selection for the Dutch-taught Descartes College. This is a university-wide honours minor in Dutch, in which 25 Utrecht University students participate every year (four modules of 7.5 EC; two modules per year).

The courses focus on all aspects of science. During each course a reflection from a different perspective on science will be posed. There is a lot of room for developing a discipline-transcending culture for conversations and training of diverse skills. You will get the opportunity to meet fellow students and teachers in an informal setting by which a close group of academics can arise that likes to discuss all aspects of science together.

- ten discussion lectures by guest speakers from different disciplines
- two plenary debates
- literature that has to be studied before each meeting
- one or two writing assignments
- drinks after each meeting
- excursions to museums and foreign universities

More detailed information about Descartes College can be found on the [Descartes College website](#).

This website also contains information about the application procedure. The programme coordinator is [Herma Bijl \(honourscollege@uu.nl\)](#).

### 1.6 STUDYING ABROAD

The Faculty of Geosciences has exchange agreements with over 60 universities, which means that every year Geoscience students can study at an international partner institution while the faculty receives a number of foreign students in exchange. We are acquainted with the programmes of many institutions, and we know that their education offers excellent possibilities for students from Dutch universities.

Studying abroad may be an interesting addition to the study programme at Utrecht University. As our partners have different courses to offer, there is a much wider choice in subjects and fields than in Utrecht. Students can compose their own set of courses that match their specific interests. In addition to partners of the Faculty of Geosciences, there are also UU-wide partners. With the latter, students are not restricted to subjects from the Geosciences, but they can also follow subjects from different fields, such as the humanities.

However, there are more reasons to study abroad. Studying abroad offers a wealth of experience: students acquire a better understanding of the cultural differences in the world, they learn to speak a second language fluently, and they develop their social skills. Furthermore, their confidence increases and they learn to be more independent. All these skills increase their chances on the labour market. Employers increasingly focus on what candidates have to offer in addition to what they learned in their regular degree programme: so it is advisable to seize this opportunity. In addition, it is also simply good fun to meet people in a different country and of a different culture.

#### ***Too much to organise?***

Of course, there are things to arrange, but this is not too bad; however, it is important to start in time. Students who are thinking of studying abroad could start by looking on the International Office [website](#).

It is important to consider the following questions:

- Which university would you like to attend?

- Does the UU or the Faculty of Geosciences have an agreement with this university?
- What courses would you like to follow at this university?
- When would you like to go? From when to when?

After answering these questions, contact the study advisor to match the wishes to the study programme.

The Geosciences International Office is there to answer practical questions about staying and studying abroad. The International Officer can give personal advice and assist in the necessary steps to take. [opening hours](#):. It is also possible to make an appointment by email: [international.geo@uu.nl](mailto:international.geo@uu.nl). In October and November, the International Office organises several information events. The dates can be found on the website of the study programme: simply click on 'Studying abroad'.

Many members of study association EGEA have studied abroad themselves; they can help with any practical questions (housing, problems, tips). [EGEA](#) can be found in the Buys Ballot building, room 2.74.

### ***Practical matters***

As soon as the decision has been made, students can apply for an exchange in Osiris. You have to choose a top 3 of favourite universities. After selection, you will be nominated to the host university and you will receive an invitation to apply at this university.

It is important to have a good look at the application deadlines. More information about applying in Osiris can be found on the [website](#) of the International Office of the UU for U Students Services: or see the website of your study programme and click on 'Studying abroad'.

### ***Useful information***

- Anyone who has obtained a minimum of 60 EC at the start of the exchange period is eligible to study abroad.
- Generally, the EC points obtained at our foreign partner universities count towards the elective course profile. Study delay can thus be avoided, but it is necessary to request permission from the Board of Examiners to follow these subjects with the approval [form](#) that you will find on the study abroad webpage of your programme.
- Students whose internship or exchange takes place in an EU country are eligible for an ERASMUS scholarship. This is a monthly extra financial allowance, in addition to the regular student grant. More information can be found on the [website](#).
- It may be wise for students whose internship or exchange takes place in non-EU country to have a look on this [website](#) to see whether they are eligible for a scholarship.
- It is advisable for students who go abroad on an internship or exchange to stop their OV student card, as they can then receive a monthly compensation instead. The application should be signed by the Student Affairs Office.

In short, the period abroad does not have to be much more expensive than the same period in the Netherlands.

## 1.7 EDUCATIONAL CONCEPT AND MUTUAL EXPECTATIONS

What can students expect from the Bachelor's programme? And what is expected of the students?

The department aims to offer an inspirational and high quality study climate, in order to achieve the maximum learning effect. Everybody involved in the programme – both lecturers and support staff – feel that positive study results are normal for students with adequate pre-knowledge who are totally committed to their studies from the beginning of each course. Activating lessons, several assessment moments and effort requirements are central to our educational concept.

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### 1.7.1 ACTIVATING LEARNING

The teaching methods in our Bachelor courses are varied and aim at activating the students. This means that students not only follow lectures, but are also actively involved during tutorials (maximum group size 25 students): they work on projects and on solving concrete problems, which are closely related to the scientific research of the lecturers. For example, in a number of courses, a concrete and topical environmental problem is the starting point of the learning process. Here, students acquaint themselves with the skills and knowledge necessary for analysing and/or solving the problem. Activating education means that students themselves shape their own learning process by completing individual or group assignments, by participating in debates or simulations, and by applying methods and models. The teacher has mostly a facilitating role in these courses: giving directions, instructions and feedback on student achievements.

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### 1.7.2 SEVERAL ASSESSMENT MOMENTS

Each course has several assessment elements. The final assessment of a course does therefore not depend on only one final, written test. As a rule there are possibilities for feedback and improvement, although this depends on the set-up of each individual course. If the final assessment of the course turns out to be negative, the lecturer then determines how the student can improve this result (repair), on condition that the original final grade is at least 4.00 (without rounding up). 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. More information can be found in the course descriptions, the course manuals and the Education and Examination Regulations (OER), Section 5 (Assessment).

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### 1.7.3 ACTIVE INVOLVEMENT AND EFFORT REQUIREMENTS

Students are expected to be actively involved in all classes and to be present during the contact hours. Course manuals are made available at the start of each course, and they describe the effort requirements and the teaching methods applied in the course. Effort requirements may include attendance requirements for certain meetings. The first meeting is nearly always obligatorily, and students who do not meet the effort requirements described in the course manual are given an insufficient grade or no final grade. Article 4.4 of the Education and Examination Regulations (OER) specifies that an exception to the attendance requirements can only be made if a student can demonstrate that the absence is due to reasons beyond their control (special circumstances as a result of e.g. illness or family circumstances).

#### ***Cancel in time***

Students that cannot attend a preliminary or other exam, obligatory lecture or working group, should register their absence via: <https://fd21.formdesk.com/geo/AbsenceForm> prior to the meeting, and by 9.30 a.m. at the latest.

Absence or illness does not relieve students of their obligation to perform to the best of their ability. In other words, students who have not been able to complete a paper or give a presentation should contact the course

coordinator to find out if it can be rescheduled for another date. If the quality or quantity of a student's attendance has been insufficient, the course coordinator may exclude this student from the remainder or part of the course.

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#### 1.7.4 TIMELY ENROLMENT

It is absolutely crucial that students who wish to participate in the courses for the next period enrol in time via Osiris (see Chapter 3, 'Practical information'). Students who have not enrolled timely and correctly will not be admitted to the course or to course facilities such as Blackboard; moreover, no course results can be registered.

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#### 1.7.5 OWN WORK: FRAUD AND PLAGIARISM

Students must always hand in authentic work. Discussion with other people may enhance the quality, but the final product should always be the student's own work. Scientific work, including that by students, builds (negatively or positively) on other people's work; therefore, the student should refer to this work in a correct manner. In other words, citing other people's work is allowed (and often obligatory), but copying other people's work and presenting it as own work is plagiarism: a major scientific offence. Lecturers use software to check student texts for plagiarism. Article 5.15, 'Fraud and plagiarism' of the Education and Examination Regulations (OER) describes the penalties for fraud and plagiarism, which include a year-long ban from all exams.

### 1.8 FOLLOW-UP PROGRAMMES AFTER OBTAINING THE BACHELOR'S DEGREE

Students who have successfully finished the major Global Sustainability Science are well prepared for the Master's programmes Sustainable Development, Sustainable Business and Innovation, Energy Science, and Water Science and Management. Other follow-up programmes (Master's or otherwise) at Utrecht University that are interesting for GSS graduates include Innovation Sciences, Science Teacher Education, Science Education and Communication, Biology, International Development Studies, and Earth Sciences. UU Master's programmes assess all applications individually. It is also possible to be admitted to similar Master's programmes at different universities, both in the Netherlands and in Europe (although this involves certain conditions). Students may only be admitted to a UU Master's programme if they have obtained their Bachelor's degree (i.e. have finished all the courses and obtained 180 EC). Enrolment for the following academic year closes on 1 June.

### 1.9 CAREERS GUIDANCE IN GLOBAL SUSTAINABILITY SCIENCE

Students follow a study programme to find a job that suits them after graduation, and a job in which they can use their qualities and which matches their interests and ambitions. In addition to the knowledge and skills that they need as a sustainability expert, students gain a great deal of experience that they can use after graduation as preparation to the labour market.

The labour market for sustainability scientists is very diverse. Recent research shows that most graduates work as researchers, policy advisors or environmental advisors. One third of our current graduates works in public governance (at the national, provincial or municipal government, or at one of the water boards). Approximately 25% work at research institutes such as RIVM and RIZA, or at a university, whereas another 25% work at an engineering company or consultancy firm. Other graduates work for environmental organisations and environmental education institutions.

Students who enter the labour market straight after obtaining their Bachelor's degree will have to be content with a position (and remuneration) at the level of higher vocational education. It is less likely that they will find

a research or management position at the top of the organisation. The Master's programme provides a better outlook.

During the Global Sustainability Science study programme, students become acquainted with different aspects of the professional field, thus obtaining a better idea of what they would like to do after graduation and what is required for this. GSS organises activities in the field of careers guidance, sometimes as an integral part of a course. These include the following:

#### *Practical assignments*

Many courses contain case studies and practical assignments. For example, in the course *Sustainability Challenges* students participate in a group project about one of the many actual challenges related to the UN Sustainable Development Goals. The *Regional Integration Project* includes a multidisciplinary field study on the island of Texel. The *Consultancy Project* is explicitly aimed at integrating knowledge and skills on behalf of professional practice. In this project, students work in groups on practical assignments for clients such as the Province of Utrecht and the Municipality of Utrecht. In the *Business, Sustainability and Innovation* course, students work on actual business cases.

#### *Guest lecturers*

The Global Sustainability Science programme regularly engages guest lecturers; these include graduates as well as lecturers from a variety of organisations and companies.

#### *Excursions and fieldwork*

Many courses include excursions, fieldwork or visits to a company.

#### *Contact with graduates*

Students, teachers and graduates can join the Utrecht University Environmental Sciences Network ([UUESN](#)) free of charge. This network has a [LinkedIn community](#) where people may be contacted for internships, vacancies, meetings, and so on.stor

#### *Storm activities*

Not only is the study programme active in this field, but study association [Storm](#) also offers various activities aimed at acquainting students with the labour market. These include:

- Visits to companies
- Visits to the European Parliament
- Study trips abroad with company visits
- Business cases
- Lectures

Every year Storm organises the Career Event Environmental Sciences, which is focused on outlining the career perspectives of future environmental professionals. The programme consists of lectures, workshops, job search skills training and company events.

#### *UU Career Services*

UU Career Services support students preparing for their future career. Both online and off-line career services will support you as you prepare for your professional career. Ask your tutor or study advisor for the flyer 'Career orientation throughout your bachelor'. Find out which job market oriented activities are organised for

you and what you can do to familiarise with the work field. Services of UU career services are especially for third year bachelor students and include training courses, interviews with a career coach, tests, CV checks and career days. More [details](#)

The career officer of the Faculty of Geosciences is [Franca Geerdes](#).

## 1.10 COURSE SCHEDULE 2021 - 2022

**Bold and underlined** = obligatory major course

**Bold** = major elective course

Possibly interesting elective profiling options can be found below the calendar and in §1.4.5; please note that you fulfil any entrance requirements and/or recommended pre-requisites!

### Year 1 (cohort 2021- 2022)

Period 1	<b><u>(A+D) Sustainability Challenges, GEO1-2410</u></b>	<b><u>(C) Mathematics &amp; Systems Analysis GSS, GEO1-2411</u></b>
Period 2	<b><u>(A) Natural Processes GEO1-2412</u></b>	<b><u>(B) Foundations of Social Sciences for Sustainability, GEO1-2413</u></b>
Period 3	<b>(B) WCE: Chemistry and the Environment, GEO1-2206</b>  <b>(A) E&amp;R: Science of Energy Technologies, GEO1-2203</b>	<b>(C) GST: Politics of the Earth, GEO1-2414</b>  <b>(D) B&amp;I: Principles of Economics, GEO1-2255</b>
Period 4	<b><u>(B) Research Skills GSS, GEO1-2415</u></b>	<b><u>(A+D) Regional Integration Project, GEO1-2416</u></b>

### Year 2 (Cohort 2020-2021)

Period 1	<b>(C) B&amp;I: Organisation &amp; Innovation, GEO2-2418</b>	<b>(B) E&amp;R: Applied Thermodynamics &amp; Energy Conversions, GEO2-2212</b>  <b>(D) GST: Policy Evaluation and Design, GEO2-2113</b>
Period 2	<b><u>(D) Philosophy of Science and Ethics, GEO2-2142</u></b>	<b>(C) WCE/E&amp;R: Global Climate Change, GEO2-2143</b>  <b>(A) GST: Environmental Law, GEO2-2424</b>
Period 3	<b><u>(D) Statistics GSS, GEO2-2428</u></b>	<b>(B) B&amp;I: Economics of Innovation, GEO2-2211</b>
Period 4	<b><u>(B) Global Integration Project, GEO2-2417</u></b>	<b>(A+C) WCE: Ecohydrology, GEO2-2131</b>  <b><u>(D) Philosophy of Science and Ethics, GEO2-2142</u></b>

**Year 3 (Cohort 2019 - 2020)**

Period 1	<p><b>(C) WCE/GST: Landscape Ecology &amp; Nature Conservation GEO3-2140</b></p> <p><b>(B) B&amp;I: Business, Sustainability &amp; Innovation, GEO3-2122</b></p> <p><b>(D) E&amp;R/GST: Sustainable Energy Supply, GEO3-2420</b></p>	<p><b>(D) B&amp;I: Innovation Strategies of Firms and Entrepreneurs, GEO3-2221</b></p> <p><b>(A) WCE/E&amp;R: Land Change Science, GEO3-2419</b></p>
Period 2	<p><b>(C) GST: Sustainable Land Use, GEO3-2121</b></p> <p><b>(A) E&amp;R/B&amp;I: Sustainable Resource Use, GEO3-2421</b></p> <p><b>(B) WCE: Environmental Chemistry and Health, GEO3-2119</b></p>	<p><b>(D) WCE/GST: Integrated Water and Soil Management, GEO3-2133</b></p> <p><b>(C) E&amp;R/B&amp;I: Energy Analysis, GEO3-2223</b></p>
Period 2	<p><b>ONLY FOR COHORT 2018 and older:</b></p> <p><b>(A+B+C+D) Bachelor thesis GSS, GEO3-2422</b></p>	
Period 3	<p><b><u>(B) Consultancy Project, GEO3-2423</u></b></p>	<p><b>(A) E&amp;R/B&amp;I: Life Cycle Assessment, GEO3-2124</b></p> <p><b>(C) WCE/GST: Environmental Impact Assessment, GEO3-2123</b></p>
Period 4	<p><b>(A+B+C+D) Bachelor's thesis GSS, GEO3-2422</b></p>	

Possibly interesting elective profiling options (please make sure that you fulfill any entrance requirements and/or recommended pre-requisites!)

<i>Course code</i>	<i>Course title</i>	<i>Language</i>	<i>Period/slot</i>
GEO2-1207	Geochemical Cycles	English	1C
GEO1-7001	Stad in beweging	Dutch	1AC
GEO1-7002	Strijd om de ruimte	Dutch	1D
GEO3-2266	Sustainability, Health and Innovation	English	1C
GEO2-4203	Physical Hydrology	English	1B
GEO1-2208	Innovation Systems	English	2A
GEO2-3502	Development Geography: Theory & Practice	English	2D
B-B3WBEL09	Wetenschapper in Beleid	Dutch	2AD
GEO3-4301	Soil and Water Contamination	English	2B
GEO2-2274*	Science, Technology & Society*	English	2A
GEO2-2427	Futuring for Sustainability	English	3A
GEO2-1215	Paleontology - fauna	English	3A
GEO2-2116	Milieu, Gedrag en Communicatie	Dutch	3C

<i>Course code</i>	<i>Course title</i>	<i>Language</i>	<i>Period/slot</i>
GEO2-2006	Inter-university sustainability challenge	English	3C
GEO2-4211	Natural Hazards	English	3A
GEO3-2225	Innovation Policy	English	3A
202000024	Thematic Interdisciplinary Challenge	English	3AD
GEO3-4308	Hands on GIS	English	3B / 4D
GEO2-2425	The Sustainability Game **	English	3C
GEO3-2276	Digital Innovation	English	4A
GEO1-2272	Management E&T Technologieën	Dutch	4D
GEO3-2426	Tailor-made course GSS	Dutch/English	1-2-3-4

\* Only for GSS, track Business & Innovation

\*\* Minimum 18 participants; maximum 36 participants

### **Conversion of former courses**

Please notice that some of the courses from the programme 2020-2021 and before have been replaced or renamed.

The following courses from 2020-2021 and earlier are replaced or renamed as follows:

<b><i>Old course</i></b>	<b><i>New course 2021-2022</i></b>
Socio-economic Processes (GEO1-2413)	Foundations of Social Sciences for Sustainability (GEO1-2413)
Physics for Energy & Transport (GEO1-2203)	Science of Energy Technologies (GEO1-2203)
Chemistry of System Earth (GEO1-2206)	Chemistry and the Environment (GEO1-2206)
Statistics (GEO2-2217)	Statistics GSS (GEO2-2428)

## 2 PRACTICAL INFORMATION: WHAT EVERY STUDENT NEEDS TO KNOW

### 2.1 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.

### 2.2 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 (§ 4.1). 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.

### 2.3 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](#)). You can enroll for no more than 2 courses (15 EC) of the Faculty of Geosciences per period (code GEO\*-\*). Students that enroll on time are generally secured of a place in the course if they fulfill the entrance requirements; 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 3<sup>rd</sup> course is a course of one of the Bachelor programmes of the Copernicus Institute NW&I or GSS; codes GEO1/2/3-21\*\*,

GEO1/2/3-22\*\* or GEO1/2/3-24\*\*), students can request a 3<sup>rd</sup> course digitally via a digital form on <https://fd21.formdesk.com/universiteitrecht-geo/additionalcourseGEO>.

Please note the following points:

- The request form needs to be submitted during the *regular enrolment period*. During the late enrolment period, it is no longer possible to apply for an additional course.
- Students need to be enrolled for their other courses in Osiris before submitting their 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 if there is insufficient academic progress and/or insufficient room on the course.

*After the regular enrolment period and during late enrolment periods, no requests for taking a third course will be dealt with and therefore will be denied. Only as an exception and based on sufficiently compelling reasons may a student be allowed to take three courses in one period.*

A request for taking a third course will need to address the criteria mentioned below:

- Motivation: what is the student's motivation?
- Circumstances: are there any special personal circumstances?
- Urgency: is it necessary for the student to take three courses at once, at this point in time?
- Feasibility: will the student be able to cope with taking three courses at the same time? The following issues will be considered to check this criterion:
  - Study progress.
  - Study results so far.
  - Has the student taken three courses before and if so, were these all completed successfully?
- Thesis: if the Bachelor's thesis is one of the three courses the student wishes to take, the request will not be granted.
- Timeslot: if the third course falls into the same timeslot as any of the other courses the student will be taking, the request for a third course will not be granted.

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](mailto: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!

## 2.4 STUDY ADVICE IN THE FIRST YEAR

The UU has been issuing a Binding Study Advice (BSA) at the end of the first Bachelor's year since 2006-2007. For students of the Faculty of Geosciences, this means that you cannot continue your study programme if you have earned less than 45 credits at the end of the first year (see also OER, Article 7.4).

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### 2.4.1 PRELIMINARY STUDY ADVICE

In December you will receive a preliminary advice, based on the results of the two courses from period 1. Although this preliminary study advice is not binding, it is an important indication. There are three possible outcomes for this advice: Positive (P), Warning (W) and Negative (N), for when you have achieved 15, 7.5 or 0 credits respectively. When you receive a warning or negative preliminary advice, it is wise to consult with the study advisors. They can advise you on the options you have: sometimes it was just a matter of bad luck or getting used to studying, but sometimes you have to actively change your study approach. And in some cases it is wise to consider dropping the programme.

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### 2.4.2 BINDING STUDY ADVICE

In period 2, first-year students with insufficient progress or who made a wrong study choice have the possibility to stop studying before February 1<sup>st</sup>. In that case they will not receive Binding Study Advice (BSA) at the end of the year. Therefore everyone still registered on February 1<sup>st</sup> does receive a BSA at the end of the year.

Halfway through period 3, when the test results of the second period have been processed, you will receive an email from the study advisors explaining once more the rules of the Binding Study Advice. At that moment you are already a step further in your first year and you also have more insight in your progress. Please contact the study advisors if your progress is lacking.

After period 4 (when the academic year is over) you will receive your official Binding Study Advice by letter. There are two routes to receive a positive Binding Study Advice:

- 1) Achieving 45 credits in the first year of your Bachelor's programme, not including possible exemptions – this comes down to completing at least six courses;
- 2) Achieving 60 credits in total that count in your curriculum, including exemptions when applicable.

The second route is especially interesting for students who have already obtained credits at Utrecht University or another higher education institute before the start of the current academic year. When you do not meet one of these two routes, you will receive a negative Binding Study Advice.

However, if there is a study delay due to force majeure, you can request a hearing with the Board of Examiners. There are two possible outcomes after such a hearing: Your appeal is honoured and you will receive a so called deferred BSA - you may continue your studies for one year and in that year you must get a positive BSA via route 1 or 2. The other outcome is that your appeal is not honoured and you will receive a definitive negative BSA - you will not be allowed to register for this programme for four years.

Reasons with which you can successfully appeal to an intended negative BSA include (among other things): illness, pregnancy, functional disorder or special family circumstances. During the hearing it will be discussed what circumstances beyond your control have prevented you from studying successfully and how that relates to the credits you've missed. You will also be asked if you've contacted the Study Advisors and what you've done with their advice.

For a detailed description of the BSA regulation, see Article 7.4 of the Education and Examination Regulations (OER), later in this study guide.

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### 2.4.3 PERMANENT PROGRESS REQUIREMENT FOR NON-EU STUDENTS

Students from outside the EU have a permanent yearly progress requirement of 30 credits per year. As opposed to the Binding Study Advice (which is only for the first year), this non-EU progress requirement is a yearly requirement to be allowed to continue to the next academic year. Not meeting this requirement may not only result in being expelled from the programme, it may also have serious consequences for the student's visa and stay in the Netherlands – even if a student has progressed as far as the third year.

## 2.5 AUTOMATIC GRADUATION

When students are due to finish the programme, they receive a message from the student administration about graduation. After it has been verified that all the requirements of the programme have been fulfilled, the Board of Examiners will be asked to judge the student's file. **Please note:** in order to graduate, students need to have fulfilled all requirements. This means that all grades have been registered in Osiris, all tuition fees have been paid, hard copies of any earlier decisions taken by the Board of Examiners have been handed in to Student Affairs Geosciences, books have been returned to the library, and so on. Under certain conditions, it is possible to postpone the graduation, see Article 6.1.7 of the [Education and Examination Regulations \(OER\)](#).

In order to actually receive the degree certificate or to pick it up at the Student Affairs office, students need to fill out an exam registration form. For the graduation ceremony, it is important to bear in mind that strict deadlines are maintained regarding registration and handing in of documents.

Automatic graduation does not mean that students are automatically deregistered from the programme. Students need to do this themselves and they can only do so after they have received formal confirmation of graduation from the Board of Examiners.

## 2.6 RESPONSIBILITY FOR THE PROGRAMME

### *OER*

The department has carefully recorded what a student should achieve in order to fulfil the requirements to be eligible for the Bachelor's degree. To this end, the Dean of the Faculty of Geosciences draws up the Education and Examination Regulations (OER) every year; this document formally describes the entitlements and obligations of students enrolled on the study programme. The OER is published on the website and is a useful legal document, describing for example attendance and effort requirements, enrolment periods, assessment (whether students are entitled to a resit or a replacement exam), the order in which subjects need to be taken, the period allocated for checking exam papers, regulations regarding fraud and plagiarism, Binding Study Advice, the subjects that a student needs to pass to be able to graduate, and so on.

### *Bachelor 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. Juliette van Telgen MA ([j.m.t.vantelgen@uu.nl](mailto:j.m.t.vantelgen@uu.nl)).

### *Board of Examiners*

The quality of the study programme (and the implementation of the OER) is monitored by the Board of Examiners of the Copernicus Institute. Only the Board of Examiners has the authority to take decisions that depart from the OER. Requests, for example for the exemption from certain subjects or for replacing a

mandatory subject by a different one, need to be submitted to the Board of Examiners of the Copernicus Institute of Sustainable Development, f.o.a. the secretary, ([examencommissie.geo@uu.nl](mailto:examencommissie.geo@uu.nl)). Of course, the Study Advisor may also be asked for assistance. It is important to always include the student number in any correspondence with the Board of Examiners. The Board takes its decision within six weeks of receipt of any request. The rules of procedure regarding the Board of Examiners, which includes a description of the proceedings during exams, is also published on the website.

In 2021/2022 the Board of Examiners consists of:

- Prof. dr. M. Rietkerk (chair)
- Prof. dr. M. Gibescu
- Prof. dr. J. Griffioen
- Dr. W. Vermeulen
- Dr. A. Peine

#### *Programme management*

The Director of Education of the Copernicus Institute of Sustainable Development, Prof Dr Stefan Dekker, is responsible for the state of affairs in the study programme. He is advised by the Programme Committee, and this committee also includes students. The Programme Leader, Dr Margien Bootsma, is responsible for the everyday educational affairs of Global Sustainability Science.

#### *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 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 [Franca Geerdes](#).

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

## 2.7 EVALUATION AND QUALITY ASSURANCE

The Faculty of Geosciences values the high quality of its programmes and for this reason has set up a quality assurance system. Quality assurance provides information about the quality of individual courses and the programme as a whole, the study climate and students' progress and performance. Its most important goals are improving education and organisation and making the quality of the programme more visible.

One part of quality assurance which students regularly come across is the evaluation. 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. This evaluation provides important information for the lecturers to help them improve their courses. All Geosciences students may view the evaluation results of the Faculty of Geosciences on Blackboard. This may be useful, for example when making a choice about electives.

During the running of the course, we also work on improving quality. *Course feedback groups* are active on each course in order to prevent problems from exacerbating. For each course, such a group consists of 4-5 students who meet with the lecturer during the break and talk about the course so far. The purpose of these groups is to find out what is appreciated, what is going well and what practical issues can be improved. This does not concern aspects which have already been determined, such as the choice of literature, the set-up of tutorials or class times. Instead, it is all about fine-tuning; discussion topics include the readability of slides, the loudness and clarity of speech, information on Blackboard, and so on. The course study guide gives further information about the course feedback group.

Finally, at the end of each academic year (May/June) a written *Year evaluation* is carried out among the students. The Year evaluation is not about individual courses but about issues that transcend the course, such as set-up and coherence 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 Director of Education, Programme Leaders and a student delegation.

## 2.8 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.

The Student Affairs Office Geosciences is in the **Victor J. Koningsberger Building**, Budapestlaan 4a-b, Utrecht. Opening hours: see website. The opening hours may be limited during academic holidays.

Telephone: +31 30 253 9559.

[Internet](#)

Email: [studentaffairs.geo@uu.nl](mailto: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.

Student Services can be found at Heidelberglaan 6, Utrecht.

Opening hours: see [website](#)

E-mail: [studentservices@uu.nl](mailto:studentservices@uu.nl)

Postal address: P.O. Box 80125, 3508 TC Utrecht, The Netherlands.

[Internet](#)

For questions about ICT, please contact the Service Desk by email: [servicedesk@uu.nl](mailto:servicedesk@uu.nl).

## 2.9 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 ACADEMIC GUIDANCE AND STUDY ASSOCIATION

### 3.1 INTRODUCTION PROGRAMME FOR NEW STUDENTS

In the first week of September there is an introduction programme of several days for first-year students, which is organised by the department together with the study association Storm. The programme has both a social and an educational character. Its most important aim is making new students feel at home on the study programme and in the faculty as soon as possible and making them acquainted with all the different aspects of student life. The programme focuses on getting to know fellow students, the study programme, the teachers, student entitlements and obligations, effective ways of studying, and the buildings in which so much time will be spent in the years to come.

### 3.2 STUDY ADVICE AND ACADEMIC GUIDANCE

There may be situations that have a negative effect on a student's study progress. To prevent this from leading to major problems, the UU sets great store on good academic guidance of its students, not only in the first year but also in later years. Academic guidance involves assistance by the study advisors, the tutor (a teacher) and the student mentors (higher year students).

Throughout the study programme, GSS students can visit the Study Advisors, Pieter Louwman and Sacha Handgraaf ([Studyadvisor.sd.bsc@uu.nl](mailto:Studyadvisor.sd.bsc@uu.nl)), for objective and confidential advice about anything related to their studies: matters directly related to the studies – such as study delay, elective courses, lack of motivation or a potential conflict with a lecturer – and matters of a more personal nature – such as illness, handicap, pregnancy or family problems.

If necessary, the Study Advisors can refer the students to a student counsellor, student psychologist, or university study choice advisor. For students who are afraid that their studies may be delayed due to personal circumstances, it is essential that they contact the Study Advisors in time, so that they can determine together with them whether it is possible to make certain arrangements to deal with these circumstances.

The contact information of the Study Advisors can be found on [website of the bachelor](#).

The Study Advisors are a member of the National Association of Study Advisors and they comply with the [code of conduct](#) of this professional association.

The Study Advisors organise three plenary meetings specially for first-year students within the Academic Guidance (in Dutch: Studieloopbaanbegeleiding). These plenary meetings are aimed at informing students about the most important rules and practices of the study programme as well as advising students on any choices they need to make.

In the first year of Global Sustainability Science, students also have a tutor and two mentors. Every first-year student is allocated a tutor, who will help students with study skills, academic attitude and choices within the programme and other topics. The tutor will schedule two individual meetings.

Mentors are students and members of the study association, and they organise two group meetings. These meetings deal with practical affairs such as Blackboard and Osiris; moreover, the meetings are used to share the experiences and choices of older students (e.g. studying abroad).

The (preliminary) timetable is as follows:

#### *Period 1*

Sept Introduction week – Plenary Academic Guidance meeting with study advisors  
Oct Mentor meeting with mentors (older students)  
Oct Track afternoon organised by Storm (Study Association)  
Oct/Nov Individual meeting with tutor (lecturer)

#### *Period 2*

Nov Plenary Academic Guidance meeting with study advisors

#### *Period 3*

Feb Minor market organised by Storm (Study Association)  
April Mentor meeting with mentors (older students)

#### *Period 4*

May Individual meeting with tutor (lecturer)  
June Plenary Academic Guidance meeting with study advisors

### 3.3 STORM: GSS STUDY ASSOCIATION

Storm is the study association for Utrecht University students from the Bachelor's programme Global Sustainability Science and the Master's degree programmes Sustainable Development and Water Science and Management. Storm was found 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. Nearly all GSS students are members 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 [website](#).

You can become a member of Storm for only €10,- per year. In return, you will receive many benefits. First, 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. . The past year, the Storm Room has been closed due to COVID-19, but hopefully the room will open soon. As mentioned before, you will also receive a discount on your study materials and at different stores and restaurants in Utrecht. Last but not least, you can participate in all events organised by Storm's committees.

Storm has nineteen different committees, which provide a wide range of activities. At the start of each academic year, members can apply for joining one of these committees. There are great parties, drinks, weekends away and other leisure time activities. These weekends away include camping, sailing and many more. In addition, Storm organises lectures, excursions, career events, and other study-related activities. Every year, when COVID-19 allows us, Storm organises a trip abroad, during which we travel through Europe by bus for 10 days! These trips are always very popular amongst Storm's members because of their nice combination of relaxing, educational activities and visiting new places.

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

So, would you like to do more than just follow a Bachelor's programme? Would you like to get to know your fellow students even better? Are you up for joining our events or even organising them? Then come by and see us, or contact us via phone or e-mail!

Contact information:

Buys Ballotgebouw 2.79

Princetonplein 5

3584 CC Utrecht

Telephone: +31 30 253 21 64

E-mail: [bestuur@stormutrecht.nl](mailto:bestuur@stormutrecht.nl)

[www.stormutrecht.nl](http://www.stormutrecht.nl)



#### 4.1 GENERAL EDUCATION AND EXAMINATION REGULATIONS FOR THE BACHELOR'S DEGREE PROGRAMMES 2021-2022

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 11 May 2021.

*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 Bachelor's degree programmes in Earth Sciences, Global Sustainability Science, Science and Innovation Management and Human Geography & Planning to all students who are registered for and/or have applied for admission to these degree programmes.

The degree programmes referred to above are run by the Undergraduate School within the Faculty of Geosciences, hereinafter referred to as: the faculty.

These Regulations are applicable for the 2021-2022 academic year. For students who have already started their degree programme, general transitional rules have been laid down in paragraph 8, as well as per degree programme in the degree programme-specific parts with respect to the educational programme.

###### art. 1.2 – definition of terms

- In these Regulations, the terms below have the following meanings:
- 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.
- academic calendar: the division of the academic year periodically determined by the Executive Board
- the Act: the Dutch Higher Education and Research Act 1992 (*Wet op het Hoger onderwijs en wetenschappelijk onderzoek 1992, WHW*).
- component: a unit of study (course) within the degree programme, as included in the prospectus and the University Course Catalogue.
- course: the whole of the education and testing of a component.
- 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.
- 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.
- degree programme: the Bachelor's degree programme referred to in Art. 1.1 of these Regulations, consisting of a coherent whole comprised of units of study.

- 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).
- examination: the final examination of the degree programme that is passed if all obligations of the entire Master's degree programme have been fulfilled.
- examiner: an assessor with competences that have been determined by the Board of Examiners of the program.
- 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).
- 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.
- portfolio: the collection of documents relating to the performance of the student within the degree programme he has chosen.
- practical exercise: participation in a practical or another learning activity, the aim of which is to achieve certain skills, such as:
  - writing a thesis or paper
  - preparing a project or a design
  - giving a presentation or lecture
  - carrying out a research assignment
  - participating in a working group, fieldwork or an excursion
  - working together in a group
  - completing a traineeship
- semester: part of the academic year (roughly 5 months), the start and end dates of which are laid down in the academic calendar.
- special needs contract: the contract concluded by the Director of Education (or another officer on behalf of the degree programme) and the disabled student, which lays down the necessary and reasonable facilities to which the student is entitled.
- student: a person who is registered at the University to take courses and/or sit the tests and final examination of the degree programme.
- Student Affairs Geosciences: student information desk and student progress administration unit of the Faculty.
- test: interim examination as referred to in Art. 7.10 of the Act.
- Undergraduate School: framework within which the Bachelor's degree programme of the faculty is organised. The Undergraduate School is charged with organising and coordinating the academic programmes and monitoring the quality of the teaching.

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

## **SECTION 2 – PREVIOUS EDUCATION**

### art. 2.1 – Admission

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

art. 2.2 – Language requirement for holders of a foreign diploma

Holders of a foreign diploma may only register:

- a. once it has been demonstrated that the requirement of adequate command of the Dutch language has been fulfilled by passing the state examination in Dutch as a Second Language, Programme 2, or the certificate in Dutch as a Foreign Language, ‘Educatief Professioneel’ or ‘Educatief Startbekwaam’ and<sup>2</sup>
- b. after it has been demonstrated that the requirement of adequate command of the English language is fulfilled at the level of the Dutch pre-university (VWO) examination.

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: 6.0 with at least 5.5 for the component ‘writing’.
- TOEFL (Test of English as a Foreign Language). The minimum required TOEFL score is 83 (internet-based test).
- Cambridge EFL (English as a Foreign Language) Examinations, with one of the following certificates:
  - Cambridge English C1 Advanced (CAE). Minimum score: 169 total, 162 writing.
  - Cambridge English C2 Proficiency (CPE). Minimum score: 180 total, 162 writing.

art. 2.3 – Colloquium doctum (university entrance examination)

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

**SECTION 3 – CONTENTS AND STRUCTURE OF THE DEGREE PROGRAMME**

art. 3.1 – aim of the degree programme

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

art. 3.2 – mode of attendance

All Bachelor’s degree programmes are offered full-time. The degree programme in Human Geography and Planning is also offered part-time.

art. 3.3 – language of instruction

The degree programmes in Earth Sciences, Science and Innovation Management and Human Geography and Planning are taught in Dutch. A course may be taught in English if the course aims, the exit qualifications of the degree programme or the origin of the lecturer(s) or some of the students so require. The degree programme in Global Sustainability Science is taught entirely in English.

art. 3.4 – study load

1. The degree programme has a study load of 180 credits.
2. The degree programme comprises elements at an advanced level (see also art. 4.1), with a study load of at least 45 credits (in major and optional course credits together).

art. 3.5 – major

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

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<sup>2</sup> a. is not applicable to the Bachelor’s degree programme in Global Sustainability Science taught in English.

#### art. 3.6 – optional courses, minor

The degree programme includes optional courses in which the student chooses components with a total study load of 45 credits.

1. The components of the optional courses must be at the in-depth or advanced level for at least 15 credits.
2. Components listed in the University Course Catalogue may be chosen, unless in the opinion of the Board of Examiners the content is duplicated in relation to components already completed by the student. The Board of Examiners will withhold its approval if in its opinion the content is duplicated in relation to (major) components already completed or yet to be completed by the student. If components overlap fully or partially in terms of content, the Board of Examiners may limit the contribution of these components to the examination by deducting credits in proportion to the overlap.
3. If students choose a coherent whole of components that is provided by the faculty under the designation of 'minor', after approval by the Board of Examiners this designation will be shown on the supplement to the certificate of their examinations.

#### art. 3.7 – courses taken at another Dutch institution

1. Courses provided by another Dutch university or a funded or designated Dutch institution for higher vocational education are also optional components as referred to in Article 3.6(3) with the approval of the Board of Examiners. The Board of Examiners will decide the level of these courses. 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 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 university

1. Courses provided by a foreign university are also eligible for choice as referred to in Article 3.6(3) 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 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-omreken tabel](http://www.uu.nl/credit-omreken tabel). The Board of Examiners may deviate from this in exceptional cases if there are good reasons to do so.
5. Conversion of grades achieved for courses taken abroad is as follows:
- a. Foreign grades are converted into the alphanumerical 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 (<https://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 students have 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 – components taken elsewhere

- a. The condition for gaining the degree certificate of the Bachelor's examination of the programme is that at least half of the Bachelor's degree programme is passed in components provided by Utrecht University.
- b. 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.
- c. Exemption can be granted for components passed at an institute of higher education prior to the start of the Bachelor's degree programme only on the basis of Art. 5.14.
- d. Contrary to Art. 3.7.3., components that
  - have been passed prior to starting the Bachelor's programme,
  - are included in the University Course Catalogue,
  - may be contributed to the student's examination programme at the discretion of the Board of Examiners,

will not be recorded as exemptions, but recorded in OSIRIS under the course name and the original mark and stated on the International Diploma Supplement referred to in Article 6.4.

art. 3.9a - destination with negative travel advice

1. Components for which the student must travel to areas abroad or the Caribbean part of the Kingdom for which the Ministry of Foreign Affairs has given a travel advice of classification red (do not travel) or orange (only necessary travel) during the period that the course will be followed, cannot be entered in the degree programme.
2. On behalf of the Dean, the provisions of the first paragraph may be deviated from in exceptional circumstances. Permission can only be given in case:
  - it concerns an obligatory part of the study,
  - for which there is no alternative, and
  - it is necessary that this is followed, and

- there are, in the opinion of the UU, sufficient guarantees that safety and health are guaranteed.

#### art. 3.10 – honours programme

1. The Undergraduate School of Geosciences offers an honours programme. This programme is organised within the Honours College of Geosciences. The honours programme has a study load of 45 credits. A compulsory component of the honours programme is an honours thesis with a study load of 15 credits. Each honours student is expected to take an active part in extracurricular activities within the honours community. Students acquire international and interdisciplinary experience in the honours programme. The composition of the programme is stated in Appendix 2.
2. The selection of candidates, admission to the programme and the extension of admission to the programme in the second and third academic year is the responsibility of the selection committee of the Honours College of Geosciences. Applicants will receive a decision as to whether or not they are admitted to the honours programme and will also be informed of the possibility of lodging an objection to the Executive Board.
3. All prospective students may apply for the Honours College of Geosciences before the start of the degree programme. Each year the selection committee will select from the applications the students who will be admitted to the Honours College in Geosciences. The selection will be made on the basis of the motivation letter, CV and results of the previous education qualifying for admission.
4. An intake of students to the Honours College of Geosciences is also possible at the start of the second semester of the first year of the degree programme. Each year before the start of the second semester the selection committee will select from the applications the students who will be admitted to the Honours College of Geosciences. The selection will be made on the basis of the motivation letter, CV, results of the previous education qualifying for admission and the results of the first semester of the first academic year.
5. The selection committee of the Honours College of Geosciences will decide each year whether admission to the Honours College of Geosciences will be extended. Admission to the Honours College of Geosciences will be extended:
  - if 60 EC have been obtained (end of year 1) or 120 EC (end of year 2)
  - with a weighted grade average of at least 7.0
  - provided that the student has demonstrated sufficient active participation in the honours programme, and
  - provided that the student continues to demonstrate good motivation.
6. In its decision the selection committee will consider
  - the student's curriculum and portfolio
  - any particular personal circumstances that the student reports as soon as can be reasonably demanded.

#### 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

1. For the components of the degree programme, courses are taught with a study load of 7.5 credits or multiples thereof.
2. Each course is structured in such a way that active participation of the student is encouraged.
3. Each course has a course guide, which will be available to students two weeks before the start of the course.
4. All courses which can be part of the degree programme are included in the University Course Catalogue.
5. A course will be given at one of the following levels:
  - introductory: 1
  - greater depth: 2
  - advanced: 3

art. 4.2 – course admission requirements; prior education

See the degree programme-specific part 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 in time via Osiris-student. See the [student site](#).
2. All the courses 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. Students may register for two courses per period. A third course must always be requested in good time from the degree programme office. This extra course may only be chosen from the range of courses offered in their own major; requests may be made only during the regular registration period.
5. An exception to the provisions under 4. is registration by students already registered on the honours programme for courses belonging to this programme. This extra registration will always be honoured.
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 course for which they are registered.
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. A student may be granted exemption from attendance for reasons demonstrably beyond their control (exceptional circumstances as a result of illness or family circumstances, for example), at the

discretion of the course coordinator. Students must notify the study programme's secretariat of their absence in advance and must provide written evidence of the exceptional circumstances.

4. 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.
5. 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 to the Board of Examiners (see also Art. 7.3).
6. 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.

#### art. 4.5 – participation in courses; priority rules

1. If a course has a limited capacity, the University Course Catalogue and/or prospectus will state the maximum number of students for whom the course will be held.
2. Participation will be in the order of registration, with the proviso that students registered for the degree programme (including the Liberal Arts and Sciences major linked to the degree programme concerned) will be given priority on courses that belong to the compulsory part of their major.
3. Apart from the general priority rule formulated in paragraph 2, admission to courses with a limited capacity will be on the basis of the following allocation rules;
  - students who are repeating a course because they did not successfully complete it due to circumstances beyond their control;
  - compulsory course for major students in a chosen study path or track;
  - compulsory course for minor students;
  - compulsory course for exchange students accepted by the faculty who have registered in time and under approval.
4. In the case of optional courses 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. Students are expected to be aware of all information that is sent to their 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 – conclusion of courses for international students

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

#### art. 4.7 – evaluation of the quality of education

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

### **SECTION 5 – TESTING**

#### art. 5.1 – general

During the course, students will be tested for academic schooling and on the extent to which they have sufficiently achieved the learning objectives set.

1. 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.
2. For all courses, in order to achieve a final grade the student must have participated in all the compulsory partial tests for the courses.
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. Each course offers multiple tests, of which at least one is scheduled no later than halfway through the course.
5. 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.
6. The testing of the student is completed at the end of the course.
7. If a student repeats a course, the last classification gained will count.
8. Should a student pass a course, but still wishes to repeat the course, the complete course must be repeated.
9. 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.
3. Re-appointment is possible. Before making this appointment, the Dean will consult the members of the Board of Examiners concerned.
4. Persons holding management positions that include financial responsibilities or who are wholly or partially responsible for courses 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 School or Undergraduate School and the Director of Education.
5. 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.
6. The Dean will announce the composition of the Board(s) of Examiners to students and lecturers.

art. 5.3 – assessment of thesis

1. A thesis referred to in Art. 3.5 will be assessed by at least two examiners (the supervisor in question and a second assessor).
2. If the thesis is written by a group of students, each student will receive an individual assessment based on the student's explicit contribution

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 any 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 for it, 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 students do not receive a pass grade but do receive a final grade of at least 4.00 before rounding, they 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 students cannot be awarded a sufficient final average grade of 5.50 or higher because they have failed to pass one test component with the condition of a sufficient grade, they 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. Students will not qualify for a supplementary test if they have not met all the effort requirements of the course.
8. Students will not qualify for a supplementary partial test if they have 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 students are not present at the replacement test, or fail to meet the terms of the replacement test in good time, they 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 University Course Catalogue and in the prospectus or course guide. If the information in these sources does not entirely match, the course guide will apply.
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.
3. If the manner in which a test will be taken is not stated, because this test concerns a course that is not offered by the degree programme, the provisions of the Education and Examinations Regulations concerned will apply.

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.
3. Oral tests will be administered in public, unless the Board of Examiners or the examiner in question has decided otherwise in a special case, or the student has objected to this.

art. 5.9 – provision for testing in special cases

1. If a student, in order to pass the Bachelor's examination, needs a maximum of 7.5 credits for no more than one part taken previously but not passed and not providing for an individual testing possibility would demonstrably result in a delay in the studies of more than one semester, or a delay of more than one semester for the start of a follow-up programme, the student may submit a request to be eligible for an individual testing possibility.
2. 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.
3. 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. The end results of a course will be established within 10 working days after the course has been completed and made known. The course coordinator will provide the administrative office of the Faculty with the information necessary to provide the student with written or electronic proof of the student's grade.
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 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 test, students are allowed to inspect their 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 referred to in Art. 3.5 and its assessment will be kept in paper or electronic form for a period of seven years following the assessment.

art. 5.14 – exemption

1. At the student's request, the Board of Examiners may, after consulting the examiner in question, grant exemption from a component of the major, if the student:
  - has either completed a component of a university or higher vocational programme which is equivalent in content and level prior to the start of the Bachelor's degree programme; or
  - has demonstrated, through work or professional experience, sufficient knowledge and skills in relation to that component.
2. An exemption may only be for an entire course and not for part of it.

art. 5.15 – fraud and plagiarism

1. Fraud and plagiarism are defined as an action or failure to act on the part of a student, as a result of which a correct assessment of the student's knowledge, understanding and skills is made impossible, in full or in part.

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;
- having within reach tools and resources during tests, such as a pre-programmed calculator, mobile phone, 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, assignments 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/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 magazines 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 texts of printed material such as books, magazines 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 clearly referring to the source: paraphrasing must be marked as such (by explicitly linking the text with the original author, either in text or a footnote), so that 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 referring to the source, 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. 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. 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 Test 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 10 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 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 of 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. The Board of Examiners will determine the result of the examination and award a certificate, as described in Art. 6.4 once the student has fulfilled the requirements of the examinations programme.
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, if and in so far as the results of the relevant tests give it reason to do so.
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 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. After students have passed the final examination they can request the institution to terminate their registration
7. 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. The Board of Examiners will grant the request if the student:
  - is to fulfil a management position for which Utrecht University has provided an administrative grant
  - is to do a traineeship or take a component of a programme abroad
  - is obliged to take components required for admission to a Master's degree programme.
8. The examination dates may be postponed once only, for the duration of a maximum of thirteen months.

art. 6.2 – cum laude classification

1. If a student has demonstrated outstanding academic achievement in the Bachelor'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 Bachelor's examination if each of the following conditions have been met:
  - the weighted average of the grades achieved for the Bachelor's programme components is at least 8.00 before rounding.
  - during the course of the study, a maximum of one course assessed with a final grade and counting towards the examinations programme was repeated.
  - the student has been granted no more than 60 credits in exemptions that do not count towards the examinations programme.
  - 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).
  - the Bachelor's examination has been passed within four years.
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 Bachelor 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

1. The Board of Examiners will award a certificate as proof that the examination was passed. One certificate will be awarded for each degree programme, even if the student completes several programmes.
2. The Board of Examiners will add the International Diploma Supplement to the certificate which provides (international) insight into the nature and contents of the completed degree programme.
3. The degree certificates will be presented at least twice a year in a public ceremony.

#### art. 6.5 - honours

If the total honours programme as referred to in Art. 3.10. has been completed successfully, this will be stated on the International Diploma Supplement. If the Bachelor's degree is awarded with a weighted average of the grades of at least 7.00 before rounding the Honours Certificate will be added to the Bachelor's degree certificate (see also art. 6.4).

#### art. 6.6 – 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 Bachelor'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.

4. The ECTS Grading Table is calculated on the basis of:
  - all final passing marks in courses undertaken towards the degree, excluding alphanumerical results;
  - not weighted according to study load;
  - in the three most recent academic years;
  - of students who were registered for a Bachelor's Degree programme at Utrecht University.

## **SECTION 7 – STUDENT COUNSELLING**

### art. 7.1 – student progress administration

The Faculty must record the individual study results of the students and make them available through Osiris-student.

Certified student progress files may be obtained from Student Affairs Geosciences.

### art. 7.2 – student counselling

1. The Faculty is responsible for providing an introductory programme and student supervision to students registered for the degree programmes, the purpose also being to assist students in exploring potential study paths within and outside the degree programme.
2. Student counselling encompasses:
  - a compulsory matching process for prospective students prior to registration for a Bachelor's degree programme, the aim being to assist students in their choice of a degree programme that matches their ambitions, expectations and capabilities;
  - an introduction in the first week of the first semester of the first academic year;
  - assignment of a tutor to all Bachelor students, who introduces them to the study during the first semester and is available to them for supervising their further studies and making choices during the Bachelor phase;
  - advice on a group and individual basis on potential study paths within and outside the degree programme, also with a view to career options after the Master's degree programme and on the possibilities of entering the labour market immediately after obtaining the Bachelor's degree;
  - advice on a group and individual basis on study skills, study planning and the choice of further study after the Bachelor's degree;
  - referring and assisting students who encounter difficulties during their studies;
  - offering a referral to a more suitable course to students who deregister for the degree programme before 1 February of the year of their first registration;
  - an individual matching activity for those who are referred to the degree programme from another degree programme at Utrecht University during the course of the academic year;
  - providing urgent advice before 31 January and binding advice no later than 31 August in the first year as to whether or not to continue the studies, on the basis of all the credits obtained in the first year.

#### art. 7.3 – disability

Students with special needs are afforded the opportunity to take classes and sit tests in the manner agreed in their special needs contracts. Requests for special needs contracts are submitted to the student adviser.

#### art. 7.4 – binding study advice

1. In the year of the first registration students who are registered on 1 October for the degree programme for 31 January will receive a written study advice (the pre-advice) on the continuation of their degree programme. The advice will be based on the study results achieved in the first period. This advice is not binding, but gives a warning in the case of unsatisfactory study progress, so that students will still have the opportunity to improve their performance. In the case of study progress during the first period of 7.5 credits the student will receive a warning, in the case of study progress of 15 or 0 credits respectively the advice will be positive or negative respectively.
2. The student who receives a warning or a negative pre-advice will be invited to an interview with the study adviser or tutor, for the purpose of discussing study method, a reconsideration of the choice of study and any referral, if applicable. During this interview the partial results already known from period 2 and special circumstances that may have affected the student's study progress will be discussed. See also paragraphs 9 and 10.
3. At the end of the academic year, however no later than 31 August, students will receive a second written advice (the final advice) on the continuation of their degree programme. Without prejudice to the provisions of paragraphs 8, 9 and 10, a binding rejection will be attached to this study advice if the student has obtained fewer than 45 credits. The rejection applies for a period of 4 academic years.
4. In determining the number of credits obtained as referred to in paragraphs 1 and 3, all credits obtained in the first academic year will count. Exemptions and partial tests passed will not count.
5. No final advice will be given to students who submit a request to deregister from the university and the faculty before 1 February of the year of their first registration. If students register again in a subsequent academic year, the study advice as referred to in paragraph 3 will be given in accordance with the provisions applicable at that time.
6. Both the pre-advice and the final advice will be given by the Dean of the Faculty of Geosciences.
7. Before issuing a binding negative advice, the student will be given the opportunity to be heard by or on behalf of the Dean.
8. In deciding whether to issue a negative study advice, the Dean will consider the student's personal circumstances at the latter's request. Only personal circumstances that the student has reported to the study adviser or tutor as soon as can be reasonably demanded will be taken into consideration by the Dean. Personal circumstances include illness, pregnancy, a functional disorder and exceptional/serious family circumstances.
9. In considering whether to issue a negative study advice the Dean will also consider at the student's request other forms of circumstances beyond control than those referred to in the previous paragraph. Only situations beyond control that the student has reported to the study adviser or tutor as soon as can be reasonably demanded will be taken into consideration by the Dean. Furthermore, the Dean may take into consideration any unfairness of a serious nature.
10. If on the basis of circumstances as referred to in paragraphs 8 and 9 no opinion can be given on the suitability or otherwise of students, a refusal recommendation will not be issued and a recommendation on continuation of their studies as referred to in paragraph 3 will still be issued to the students at the end of the next academic year. The student must earn the number of credits referred to in paragraph 3 in that next academic year; the credits already earned earlier academic years will not count.

11. No binding negative advice can be issued to students who have achieved 60 EC or more in the first year of their degree programme.
12. An appeal against a decision for rejection may be submitted in writing, giving reasons, to the Examination Appeals Board within 6 weeks.

## **SECTION 8 – TRANSITIONAL AND FINAL PROVISIONS**

### art. 8.1 – safety net arrangements

In cases for which these Regulations do not provide, do not clearly provide or lead to obviously unreasonable outcomes, a decision will be taken by or on behalf of the Dean, after having heard the advice of the Board of Examiners. If, on the basis of the law, the decision falls within the competence of the Board of Examiners, the Dean will send the request to the Board of Examiners for it to settle.

### art. 8.2– 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, 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. 8.3 – publication

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

### art. 8.4 – effective date

These Regulations take effect on 1 September 2021.

## Appendices

### 1. Equivalent previous education

THE NETHERLANDS:

- vwo diploma 'old style' on the basis of the academic profile
- vwo diploma on the basis of 'old profiles' (vwo final examination taken pursuant to the regulations laid down in the Secondary Education Act (*Wet voortgezet onderwijs*) as it read until 31 July 2007)
- gymnasium diploma awarded pursuant to the Higher Education and Research Act 1876
- hbs diploma awarded pursuant to the old Secondary Education Act (*Middelbaar Onderwijswet*)

Final diploma in higher vocational education that comes under the Ministry of Health, Welfare and Sport (WVS, formerly Welfare, Health and Culture - WVC). These are the following vocational programmes:

- Final diploma in midwifery (awarded by, for example, the *Stichting Kweekschool voor Vroedvrouwen* in Amsterdam, the *Vroedvrouwenschool Kerkrade* under the *Rooms-Katholieke Stichting Moederschapszorg* in Kerkrade or the *Stichting Rotterdamse Opleiding tot Verloskundige* in Rotterdam)
- Final diploma for surgical assistant

Until 1 January 1997 the following programmes were also applicable:

- Orthoptics (*Nederlandse Academie voor Orthoptie* of the Faculty of Health at the *Hogeschool Midden-Nederland* in Utrecht)
- Oral hygiene (The *Academie voor Mondhygiëne* of the Faculty of Health at the *Hogeschool Midden-Nederland* in Utrecht, the *Stichting Opleiding Mondhygiënisten* in Amsterdam, the *Opleiding tot Mondhygiënist* in Nijmegen)
- Mensendieck remedial therapist (*Stichting tot opleiding van oefentherapeuten-Mensendieck* in Amsterdam)
- Cesar physiotherapy (*Stichting Opleiding Bewegingstherapie Cesar* in Den Dolder)
- Podiatry (*Hogeschool Eindhoven* in Eindhoven)

Final diploma in higher vocational education in the cultural sphere:

- Final diploma *Rijksacademie voor Beeldende Kunst* in Amsterdam
- Final diploma *Jan van Eyck Academy* in Maastricht
- Final diploma *Opleiding Restauratoren* in Amsterdam
- Final diploma *KMA/ KIM* (defence)
- Diploma as Senior Administrative Officer

### INTERNATIONAL BACCALAUREATE

Certificate of the *Diploma* of the international baccalaureate issued by the *International Baccalaureate Office* in Geneva

SURINAME certificate in pre-university education certificate

### 2. Honours College of Geosciences

Within the Honours College of Geosciences, the honours students study a continual component of 15 EC in addition to the normal programme of 180 EC, spread over 2½ to 3 years. They also complete two courses each worth 7.5 EC especially for honours students (in the optional course profile), at least four regular courses with a

replacement or additional assignment at honours level (honours option) and an honours thesis of 15 EC. This brings the total degree programme for honours students to 195 EC.

The table below gives an overview of the components.

Table: Overview of the Honours College of Geosciences programme

Component	Study load
HCG seminar / Geohuis / Honours Conference	15 EC in addition to Bachelor
Honours optional subjects	15 EC
Honours thesis	15 EC
Honours addition major subjects (compulsory and optional)	At least four subjects, no extra EC
Honours study trip abroad	Extracurricular, no EC

The detailed degree programme is described in the prospectus of the Honours College of Geosciences.

## 4.2 PROGRAMME-SPECIFIC PART OF THE EDUCATION AND EXAMINATION REGULATIONS 2021-2022

Bachelor's degree programme in Global Sustainability Science Undergraduate School of Geosciences

### Art. 2.1 – Admission requirements

1. In addition to the diplomas specified in the Act that give admission to the degree programme, the holder of a diploma of equivalent previous education listed in the General EER Appendix 1 will be admitted to the degree programme provided that the conditions referred to in Section 2 (below) have been met.
2. Applicants who have completed previous education as stated in the General EER Appendix Par. 1, or who have a diploma for passing a first-year examination at a university of applied sciences may only register for the degree programme after it has been demonstrated that they possess sufficient knowledge at the level of the pre-university (VWO) final examination in accordance with the 2007 profiles in the following subjects: English, Mathematics A or Mathematics B and two of the following four subjects: Physics, Chemistry, Biology or Economics.
3. Deficiencies in the prior education of the subjects referred to in Section 2 can be remedied by sitting the relevant tests at Boswell Beta or the central Committees for Preliminary Examinations (*centrale commissies voortentamen*) in Physics, Chemistry, Mathematics and/or Biology. The missing subjects may also be achieved by means of state examinations or adult education. In exceptional cases, the Board of Examiners may ask a university lecturer in the subject concerned to administer one or more tests.

### Art. 2.3 - University entrance examination (colloquium doctum)

The admission test referred to in Section 7.29 of the Act relates to the following subjects at pre-university (VWO) final examination level: English, Mathematics A or Mathematics B and two of the following four subjects: Physics, Chemistry, Biology and Economics.

### Art. 3.1 – Aim of the degree programme

The programme aims to:

- provide knowledge, skills and insight into the field of sustainability science, and enable achievement of the exit requirements referred to in Section 2
- provide an academic education, which means that it aims to develop competences (knowledge, skills and attitudes) related to:
  - academic thought, actions and communication
  - the use of relevant academic instruments
  - (academic) communication in English
  - application of specific knowledge of a field in a broader academic, philosophy of science and socio-cultural context
  - standards of conduct applicable during studies and within the discipline
- prepare the student for further study

From their first year of study onwards, students will learn and understand the theory and practice of scholarly research.

#### 1. General learning outcomes

Students with a Bachelor's degree in *Global Sustainability Science*:

- can acquire, interpret and conceptualise knowledge
- can analyse, structure and synthesise information
- can reason and argue logically, and think analytically and critically
- can apply methods and techniques in a scientific manner in order to solve problems
- can independently keep up to date with developments and new knowledge in their specialism
- can place their knowledge and understanding in a wider scientific and social context
- can convey scientific knowledge to both specialists and non-specialists

In addition, students have:

- a substantive understanding of research in their specialism
- the necessary basis for a university Master's education
- a reflective attitude with regard to their own functioning, individual development and career

2. Domain-specific learning outcomes:

**Knowledge:**

Students with a Bachelor's degree in *Global Sustainability Science* have:

- a basic knowledge and understanding of the nature, extent and causes of sustainability issues at different spatial and temporal levels of scale and the underlying concepts
- a basic knowledge and understanding of current and innovative solutions to sustainability issues at different levels of scale
- a basic knowledge and understanding of physical, chemical and biological processes in the natural system; social, ethical and economic processes in the social system; as well as interactions between both systems leading to sustainability issues
- knowledge of the multidisciplinary nature of sustainability issues, and of theories and methods of sustainability research, as well as an understanding of the possibilities and limitations of multidisciplinary approaches
- a more specific knowledge and understanding of the theories and methods of one of the sub-domains of sustainability issues relating to water, climate & ecosystems, energy & resources, governance & societal transformation and business & innovation
- an understanding of the complex social change processes related to the pursuit of a sustainable society and the ability to distinguish, identify and assess the effectiveness of various relevant management strategies (driven by science or social sciences)

**Skills:**

Students with a Bachelor's degree in *Global Sustainability Science* can:

- use the elementary knowledge and insights acquired in analysing and solving sustainability issues at different levels of scale
- formulate simple research questions, formulate hypotheses and statements for observation, test hypotheses and apply research methods in a sustainability study
- design a sustainability study and make a reasoned choice for quantitative and/or qualitative methods

- carry out empirical research, using techniques from science or social sciences, to process, analyse and correlate, interpret and/or model collected data, and to present the results in writing in an appropriate form (e.g. map or graph)
- find relevant literature and information on sustainability, and can study, analyse, assess and evaluate this literature and information critically
- as a sustainability expert, work together with specialists from other disciplines, and in particular have the ability within these multidisciplinary teams to confront and integrate the insights and approaches from the various disciplines with each other
- produce and orally present written work in English on their specialism and their own work, appropriate to a given forum
- reformulate a practical question or scientific problem in their specialism as a clear and researchable problem, effectively operationalise the terms therein, develop a usable conceptual framework, present the result in a coherent argument that ends with a clear, synthesising conclusion, use the results to answer the practical question or contribute to clarifying and solving the problem as far as possible, and express an opinion that is also based on weighing up relevant social, scientific or ethical aspects

### **Attitude**

Students with a Bachelor's degree in Global Sustainability Science demonstrate:

- a scientific attitude (objective, critical, ethical, etc.) in describing, explaining and predicting phenomena
- a professional attitude in carrying out their work
- an awareness of the effects and consequences of human activity on sustainability systems, and of the moral aspects of sustainable development and the need for the sustainable management of the Earth.

### **Art. 3.5 – Major**

1. The degree programme comprises a part (the major) with a study load of 135 credits that concerns sustainability science. The components listed in Appendix 1, with a total study load of 75 credits, are compulsory.
2. The students choose the other components of the major from the components listed in Appendix 2.
3. Components that also relate to the scientific and social context of sustainability science, with a study load of at least 15 credits, must form part of the major.
4. The components of the major must be at in-depth level for at least 37.5 credits and at advanced level for at least 45 credits.
5. The major includes a thesis with a study load of 15 credits, in which, as proof of competence, the student has the option of producing a paper independently, bringing together the required knowledge, skills and attitudes.

### **Art. 4.2 – Entry requirements for courses; prior knowledge**

1. For each component, the prospectus describes the entry requirements that must be met to be allowed to take part.
2. Without prejudice to the provisions in Section 1, the University Course Catalogue and the prospectus state for each course what prior knowledge is required in order to take part in the course successfully.

3. If courses in the major are provided by a different degree programme, the entry requirements as set out in the Education and Examination Regulations for that course are applicable.

**Art. 4.7 – Evaluation of the quality of 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 Global Sustainability Science

#### 1. Compulsory components of the major (75 EC)

*a. Courses at level 1 (introductory)*

- Sustainability Challenges 7.5 EC
- Mathematics and Systems Analysis 7.5 EC
- Natural Processes 7.5 EC
- Foundations of Social Sciences for Sustainability 7.5 EC
- Research Skills GSS 7.5 EC
- Regional Integration Project 7.5 EC

*b. Courses at level 2 (greater depth)*

- Philosophy of Science and Ethics 7.5 EC
- Statistics GSS 7.5 EC
- Global Integration Project 7.5 EC

*c. Courses at level 3 (advanced)*

- Consultancy Project 7.5 EC

#### 2. Optional components of the major (60 EC)

*WCE = Water, Climate & Ecosystems*

*E&R = Energy & Resources*

*GST = Governance & Societal Transformation*

*B&I = Business & Innovation*

*a. Courses at level 1 (introductory)*

Choice 1 out of 4:

- WCE: Chemistry and the Environment 7.5 EC
- E&R: Science of Energy Technologies 7.5 EC
- GST: Politics of the Earth 7.5 EC
- B&I: Principles of Economics 7.5 EC

*b. Courses at level 2 (greater depth)*

Choice 2 out of 8:

- WCE: Global Climate Change 7.5 EC
- WCE: Ecohydrology 7.5 EC

- E&R: Applied Thermodynamics & Energy Conversions 7.5 EC
- E&R: Global Climate Change 7.5 EC
- GST: Policy Evaluation and Design 7.5 EC
- GST: Environmental Law 7.5 EC
- B&I: Organisation & Innovation 7.5 EC
- B&I: Economics of Innovation 7.5 EC

c. *Courses at level 3 (advanced)*

Choice 3 out of 5:

- WCE: Integrated Water and Soil Management 7.5 EC
- WCE: Landscape Ecology and Nature Conservation 7.5 EC
- WCE: Environmental Chemistry and Health 7.5 EC
- WCE: Land Change Science 7.5 EC
- WCE: Environmental Impact Assessment 7.5 EC
- E&R: Sustainable Energy Supply 7.5 EC
- E&R: Land Change Science 7.5 EC
- E&R: Life Cycle Assessment 7.5 EC
- E&R: Sustainable Resource Use 7.5 EC
- E&R: Energy Analysis 7.5 EC
- GST: Sustainable Energy Supply 7.5 EC
- GST: Landscape Ecology and Nature Conservation 7.5 EC
- GST: Sustainable Land Use 7.5 EC
- GST: Integrated Water and Soil Management 7.5 EC
- GST: Environmental Impact Assessment 7.5 EC
- B&I: Business, Sustainability and Innovation 7.5 EC
- B&I: Innovation Strategies of Firms and Entrepreneurs 7.5 EC
- B&I: Sustainable Resource Use 7.5 EC
- B&I: Energy Analysis 7.5 EC
- B&I: Life Cycle Assessment 7.5 EC

Choice 1 out of 4

- Bachelor's thesis WCE 15 EC
- Bachelor's thesis E&R 15 EC
- Bachelor's thesis GST 15 EC
- Bachelor's thesis B&I 15 EC

When choosing the major elective courses, the following rule applies:

Students must choose courses from their own track at levels 1, 2 and 3.

**Conversion of former courses**

<b><i>Old course</i></b>	<b><i>New course 2021-2022</i></b>
Socio-economic Processes (GEO1-2413)	Foundations of Social Sciences for Sustainability (GEO1-2413)
Physics for Energy & Transport (GEO1-2203)	Science of Energy Technologies (GEO1-2203)
Statistics (GEO2-2217)	Statistics GSS (GEO2-2428)
Chemistry of System Earth (GEO1-2206)	Chemistry and the Environment (GEO1-2206)

## 4.3 REGULATIONS OF THE BOARD OF EXAMINERS

### Regulations of the Board of Examiners

(Rules & Guidelines pursuant to Section 7.12 (b)(3) of the Higher Education and Research Act)

Regulations of the Board of Examiners adopted by the Board of Examiners for the Undergraduate School of Geosciences at Utrecht University, on 8 June 2021.

Valid from September 1, 2021.

*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 consists of a central Board of Examiners and three executive panels. These executive panels implement examinations policy independently, within the frameworks set by the central Board of Examiners of the Undergraduate School of Geosciences. The chairs of the executive panels form the central Board of Examiners of the School. The central Board of Examiners acts as a framework-setting and supervisory body. It determines examinations policy and sets the frameworks in the form of regulations and procedures. The central Board of Examiners lays down the regulations of the Board of Examiners each year. In its supervisory role it also monitors the quality of the decisions and the implementation of examinations policy by the panels.

Requests to the Board of Examiners are received centrally and are then assigned by the central Board of Examiners to the executive panels.

Requests to the Board of Examiners Board are received centrally and subsequently assigned to the executive panels.

#### **PARAGRAPH 1 – GENERAL STIPULATIONS**

##### Art. 1.1 – scope of application

These Regulations apply to the tests and examinations of the bachelor study programme(s) Earth Sciences, Global Sustainability Science, Human Geography and Planning, Science and Innovation Management.

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. a. The Board of Examiners will appoint a member, excluding the external member, from its ranks as chairman. The chairman is in charge of managing the daily course of affairs of the Board of Examiners.  
b. The chairman appoints a vice chairman, excluding the external member, to replace the chairman in his absence. In absence of the chairman and the vice chairman, each individual members, excluding the external member, will be will be in charge of the daily course of affairs of the Board of Examiners.
2. The Board of Examiners will take decisions by an ordinary majority of votes. If the votes are equal, the chairman, or his/her 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 must take a decision within six weeks of receipt of an application with the exception of academical holidays and fieldwork periods.
5. The Board of Examiners will be supported in its work by an official secretary. This official secretary will not be a member of the Board of Examiners.

6. The Board of Examiners may authorize the official secretary to check on behalf of the Board of Examiners whether all the course units belonging to the examination programme of the course have been successfully completed and that the student has therefore passed the examination. To this end, the Board of Examiners will give the official secretary written authorization, containing the frameworks and general instructions relating to exercising the delegated 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 which 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. The Board of Examiners will appoint members of the academic staff charged with teaching a course as examiners. The Board of Examiners may furthermore appoint other members of the academic staff and experts outside the study programme as examiners. The examiners are responsible for the testing of the course.
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 will register all examiners so that it is known which persons are authorized to administer examinations and to determine the results thereof.

### **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 a written or digital 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. Before the Board of Examiners takes a decision, at the student's request they must give the student the opportunity to be heard on the matter.
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 30 minutes at most 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 the case of practical exercises 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. The last mark given will apply in assessing the result of a test/course.

#### Art. 3.2 – assessment of thesis, research assignments, undergraduate theses

1. The Board of Examiners will ensure that the assessment criteria for the thesis, research assignments and undergraduate theses/essays are laid down and that these are included in the course or thesis manual.
2. If in the case of practical exercises several students contribute towards a single joint project, the Board of Examiners will use the following guidelines:
  - a. agreements on the division of tasks among the students who are to perform the work must be set out in writing by the examiner(s) responsible prior to the start of the work;
  - b. students will be marked individually on the basis of the work they have performed.
3. A thesis must be assessed and marked by two examiners. If the first and second examiner cannot reach agreement, the Board of Examiners will appoint a third assessor who will give a binding final opinion.
4. The examiners will provide an explanation, using an assessment form, of the manner in which the final mark has been reached.

#### Art. 3.3 – subsequent discussion

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 discussion will be held 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 a discussion with the examiner. The discussion will be held at a place and time determined by the examiner.
3. If a collective discussion is organized, the student can submit a request as referred to in the second paragraph only if the student was present at the collective discussion and the student gives reasons for that request, or if the student was prevented by force majeure from attending the collective discussion.
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 charged 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 and suchlike – in relation to the validity (they measure knowledge, skills and competences) and reliability (are they 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 orders. The Assessment Committee is responsible to the Board of Examiners for carrying out these orders.

#### Art. 4.3 – declaration of invalidity of test for all participants due to quality shortcomings

1. If it becomes apparent that the test has such serious quality shortcomings that it cannot be ascertained whether and to what extent the 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 online proctored tests invalid in the event of irregularities

1. The Board of Examiners may declare an online proctored test of one or more students invalid if during the test there has been insufficient insight in the possibility of fraud, or if circumstances have been insufficiently fraud-proof.
2. If the situation referred to in the first paragraph is the result of an irregularity that is at the risk and expense of the student, the student will not be given another chance. If a situation arises outside the student's control that the student reports during the test, the student may request another chance. If the situation is at the risk and expense of the university, a new test opportunity will be scheduled.
3. An irregularity at the risk and expense of the student exists if the student has not followed the instructions for the online proctored test.

#### 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 the above, 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.

2. The Board of Examiners will only conduct such an investigation if it establishes that there are certain facts or circumstances that lead 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).

#### **PARAGRAPH 5 - EXEMPTIONS, APPROVAL OF COURSE UNITS**

##### Art. 5.1 – exemption

1. Students wishing 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 sought
  - for which course(s) the exemption is being sought
  - 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 submit the request for advice to the examiner(s) in charge of teaching the course(s) for which the exemption is being sought.
3. The Board of Examiners will decide within 6 weeks of the date of receipt of the request on whether the exemption will be granted. With the exception of academic vacation periods as laid down in the academic calendar and during the fieldwork period.

##### Art. 5.2 – approval of course units

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 request, giving reasons, 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 submit the request, if necessary, to the programme coordinator or a specialist lecturer for the course for advice.
3. The Board of Examiners will decide within 6 weeks of the date of receipt of the request. With the exception of academic vacation periods as laid down in the academic calendar and during the fieldwork period.
4. If approval concerns course units outside the UU, following their completion the student will submit a certified transcript or a summary of the monitoring of student's progress.
5. Based on the certified transcript, course content description(s) and to request further substantiation by the student, the Board of Examiners grants course level 1, 2 or 3 to a course outside the 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 appoint course level (1, 2 or 3) to courses passed abroad.

8. When the Board of Examiners decides to approve a course passed abroad as a replacement in a major, than the level of the replaced course is allocated.
9. The student that can demonstrate that the course level requirements in the Course Profile cannot be met, has to submit a detailed substantiated request to the Board of Examiners in case a level 2 or 3 is needed.
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 course.

## **PARAGRAPH 6 – COMPLAINTS**

### **Art. 6.1 - complaints about testing and marking**

1. The first point of contact for students with a complaint about testing and marking is the lecturer, who as the 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 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 <http://students.uu.nl/praktische-zaken/regelingen-en-procedures/klachten-bezwaar-en-beroep/college-van-beroep-voor-de-examens-cbe>
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 will 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. recommendations

### Art. 7.2 – amendments

1. Amendments to these regulations will be laid down by the Board of Examiners in a separate decision.
2. An 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 2021.
2. The Board of Examiners will ensure the publication of these regulations, as well as any amendment thereto, via the internet.

#### 4.4 TEACHING PERIODS COPERNICUS INSTITUTE OF SUSTAINABLE DEVELOPMENT 2021-2022

This holds only for Master's courses offered by the Copernicus Institute (codes GEO4-22XX, 23XX, 25XX, 26XX and 60XX); this might deviate from courses with other (GEO-)codes.

36	37	38	39	40	41	42	43	44	45	Green = Dept. of SD	
1	2	3	4	5	6	7	8	9	10	Red = GEO	
6-12/9	13-19/9	20-26/9	27/9-3/10	4-10/10	11-17/10	18-24/10	25-31/10	1-7/11	8-14/11		
GEO Intro					13/10 Master open day				break		
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
15-21/11	22-28/11	29/11-5/12	6-12/12	13-19/12	20-26/12			10-16/1	17-23/1	24-30/1	31/1-6/2
			7/12 rep. 1	14/12 rep. 1							break
6	7	8	9	10	11	12	13	14	15	16	
1	2	3	4	5	6	7	8	9	10	11	
7-13/2	14-20/2	21-27/2	28/2-6/3	7-13/3	14-20/3	21-27/3	28/3-3/4	4-10/4	11-17/4	18-24/4	
10/2 UU Career day											
11/2 Master Open Day			1/3 rep. 2	8/3 rep. 2					15/4 Good Friday	break	
17	18	19	20	21	22	23	24	25	26	27	28
1	2	3	4	5	6	7	8	9	10	11	Break
25/4-1/5	2-8/5	9-15/5	16-22/5	23-29/5	30/5-5/6	6-12/6	13-19/6	20-26/6	27/6-3/7	4-11/7	

27/4 King's Day	5/5 Liberation Day
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17/5 rep. 3	24/5 rep. 3
	26 - 27/5 Ascension day/break

6/6 Pentecost
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break	11-15/7 rep. 4
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## 4.5 UU-TIME TABLE 2021-2022

### Teaching periods

Semester I:

Period 1: Monday 6 September – Friday 12 November

Period 2: Monday 15 November – Friday 4 February

Semester II:

Period 3: Monday 7 February – Friday 22 April

Period 4: Monday 25 April – Friday 15 July

### 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](http://www.uu.nl/osirisstudent))

For period 1: 31 May 2021 up to and including 27 June 2021

late enrolment 23 and 24 August 2021

For period 2: 20 September 2021 up to and including 3 October 2021

late enrolment 25 and 26 October 2021

For period 3: 1 November 2021 up to and including 28 November 2021

late enrolment 24 and 25 January 2022

For period 4: 31 January 2022 up to and including 27 February 2022

late enrolment 4 and 5 April 2022