International 4EU+ Semester in Geography / Geosciences

4EU+ Plug-In Modules

Fall Semester 2026

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The following pages present an overview of the 4EU+Modules as offered during the Fall Semester 2026. Each module contains information about the course options.

The exact course dates will be published in summer before the start of the semester.

1. Copenhagen University

Module 1: Human Geography and Geoinformatics (Block 1)

This module contains courses addressing human geography in a broad sense, including topics such as development, economic, and social geography, as well as human-environment interactions and land use change. In addition, there is a GIS component for application of GIS to human geographical analysis. The focus is global, but there are more elements of Global South topics in this module.

Content

Courses: 4

ECTS: 7,5 each

Dates: September – November

Course Options:

- Environment, Society and Development in the Global South
- The Dynamics of City Regions: Social and Economic Change
- Advanced Land System Science
- Applied GIS and Geoinformatics for Urban Spatial Analysis

Module 2: Human Geography and Geoinformatics (Block 2)

This is a continuation of module 1, addressing human geography in a broad sense, including topics such as development, economic, and social geography, as well as human-environment interactions and land use and global value chains. In addition, there is a GIS component for application of GIS to human geographical analysis. The focus is Global, but there are more elements of Global North topics in this module.

Content

Courses: 4

ECTS: 7,5 each

Dates: November-December

Course Options:

- Advanced Geoinformatics
- Urban and Rural Transformation: uneven geographies in the Global North
- Globalisation and Dynamics in Global Value Chains
- Rural landscapes: transformation and governance

Module 3: Physical Geography and remote sensing (Block 1)

This module focuses on a wide range of physical geographical topics such as climate change, coastal geoscience and soil science. It also addresses remote sensing of the environment, which has both physical and human geographical applications. The focus is global.

Content

Courses: 3

ECTS: 7,5 each

Dates: September – November

Course Options:

- Remote Sensing of the Bio-Geosphere
- Environmental Soil Science
- Coastal Geoscience

Module 4: Physical Geography and remote sensing (Block 2)

This is a continuation of module 3. It focuses on a wide range of physical geographical topics such as glacial geoscience and soil science. It also addresses advanced remote sensing and spatial analysis, which has both physical and human geographical applications. The focus is global.

Content

Courses: 3

ECTS: 7,5 each

Dates: November-December

Course Options:

Course Options:

- Glacial Geoscience
- Ecosystems, Climate and Climate Change
- Spatial and Temporal Pattern Analysis

2. Heidelberg University

Module 1: Challenging Topics in Urban & Economic Geography

This module brings together courses in urban and economic geography. Relevant theories, current developments, actual discussions and empirical studies.

Content

Courses: 3

ECTS: 5 each

Dates: October-December

Course Options:

- Mobilities
- Governance Case Analysis
- North American Cities

Module 2: Physical Geography

This module combines methodological aspects for the investigation of soils and sediments in the field and in the lab with current issues of quaternary landscape evolution and the study of natural hazards.

Content

Courses: 3

ECTS: 5 each

Dates: October, 14-December, 20
Course Options:

- Geomorphological and geophysical investigation of quaternary soils and sediments
- Sedimentological and geochemical analyses of soils and sediments
- Hazards in drylands
- Natural hazards in the Anthropocene

3. University of Milan

Module 1: Food Economies

Food systems are responsible for around one-quarter (26%) of global greenhouse gas emissions. This includes emissions from land use change, on-farm production, processing, transport, packaging, and retail. Therefore, studying them is the first step to understanding what is wrong and building a newer and better economy for our collective future. This module will deepen your knowledge of how the food industry functions practically, as well as subjectively.

Courses: 3
ECTS: 6 each
Dates: October-January
Course Options:

- Economics of Food Global Value Chain
- Life Cycle Assessment: Theory and Applications
- Consumer Behaviour and Sustainable Food Consumption

Module 2: Governance of Sustainability Transition

This module bridges corporate strategy with the macro-level legal and economic frameworks driving the green transition. Anchored by a major focus on management, it equips students to design circular business models and master ESG reporting. This strategic core is contextualized by environmental and food law, which defines the regulatory playing field for safety and security, and energy economics, which provides the analytical tools to understand market dynamics, pricing, and decarbonization policies. The curriculum prepares professionals to align internal innovation strategies with complex external regulations and energy market incentives.

Courses: 3
ECTS: 6 each
Dates: October-January
Course Options:

- Environmental and Food Law
- Management for Sustainability and Innovation (module “Environmental Management”)
- Energy Economics

Module 3: Resource Systems and Modelling

This module integrates technical and economic perspectives to address complex environmental challenges. It merges the physical management of natural capital, spanning agro-waste valorization through clean technologies and the sustainable exploitation of georesources, with applied quantitative economics. Students will move beyond simple classification to analyze circular flows and mitigation strategies. Crucially, the course equips participants with statistical and general equilibrium models to economically assess these physical systems and climate policies. The goal is to train researchers capable of bridging the gap between engineering optimization and rigorous economic valuation.

Courses: 3
ECTS: 6 each
Dates: October-January
Course Options:

- Waste Management and Sustainability
- Georesources and Sustainability
- Applied Environmental and Resource Economics

4. Charles University Prague

Module 1: Physical Geography: Hydrological and meteorological hazards

This module focuses on natural hazards related to hydrosphere and atmosphere. It provides an overview of contemporary big ideas in physical geography, recent approaches to flood risk management, hydrological modelling and it is also devoted to high-impact weather phenomena such as heat waves, heavy rains etc.

Courses: 4
ECTS: 3-5 each
Dates: October-January
Course Options:

- Hot topics in Physical Geography
- Flood risk management
- Modelling of hydrological processes
- High impact weather phenomena

Module 2: Advanced GIS and remote sensing applications

This module provides different courses of data analysis and visualization.

Courses: 5
ECTS: 5 each
Dates: October-January

Course Options:

- 3D modelling and digital Earth
- Cloud computing
- Processing of imaging radar data
- Advanced Earth observation for urban and population studies
- Open source GIS

5. University of Warsaw

Module 1: Geography of Sustainable Tourism

This module brings together courses in tourism and socio-economic geography. Relevant theories, current development, examples, actual discussions and empirical studies.

Courses: 3

ECTS: 5 each

Dates: October - December

Course Options:

- Concepts in Tourism Geographies
- Heritage Tourism
- Tourism and Cities

Module 2: Global and Regional Geography

The module combines the regional and global approach to the geography of the world. The courses present contemporary, global problems from different perspectives (environmental, political, cultural, socio-economic) and covers the issues of the relations between local and regional development.

Courses: 3

ECTS per course: 4-9 ECTS

Dates: October – December

Course Options:

- Global problems in the contemporary world
- Geography of the World
- Sustainable development - between global and local perspectives

Module 3: Introduction to analysis and visualization of spatial data acquired from databases and satellite images

The module provides introduction to the process of spatial data acquisition, analysis and visualization. The focus is given into the two kinds of data sources: satellite imagery as a source of raster data and spatial databases with vector data. There are covered theoretical foundations, but the emphasis is put on the practice with use of GIS software of different kinds.

Courses: 3
ECTS: varying: 3, 5 or 7 ECTS each
Dates: October - December
Course Options:

- Data acquisition and display
- Data processing and visualization
- Change detection analysis and thematic mapping

6. Complementary course (all universities)

Urban Regulations and Political Memory: Towards understanding Spatio-Temporal aspects of Urban Development PLUS (UNREAD)

(Online + on-site) (Lead: University of Warsaw)

Key topics of the course are driving forces of urban changes, the development of smart cities and interdisciplinary methodologies of urban studies. The project concerns change in the conditions of the urban development of smart cities in Poland, Italy, Czechia and Germany, according to three dimensions: past (history), present (law) and future (geography), emphasizing an integrated and interdisciplinary approach in order to understand the complexity of new urban centres in which real estate development must coexist with the protection of the environment and with the history and heritage of the local community. https://unreadplus.wpia.uw.edu.pl/

Courses: 1
ECTS: 6-8 (Online course & On-site conference)
Dates: October – December, conference in March