

BSc-Themen 2024

Remote Sensing Laboratories

Earth System Science (ESS)

- ESS 1: How do plant functional traits influence carbon cycle components such as photosynthesis and carbon storage? (EN) Supervised by Prof. Maria J. Santos's group
- ESS 2: Climate Change Impacts on Biodiversity and Food Security in Agroforestry Systems (EN). Supervised by Prof. Maria J. Santos's group
- ESS 3: Which are the functional traits in tropical plant communities with the most accurate remote sensing estimates and which best represent ecosystem changes? (EN) Supervised by Prof. Maria J. Santos's group
- ESS 4: Monitoring an exotic plant species invasion from space (EN). Supervised by Prof. Maria J. Santos's group
- ESS 5: Nucleation in aquatic ecosystems and consequences for restoration (EN). Supervised by Prof. Maria J. Santos's group
- ESS 6: Geoengineering for and in the Arctic (DE/EN). Topic only available for ESS students. Supervised by Prof. Gabriela Schaeppman-Strub's group

Remote Sensing (RS)

- RS 1: Environmental monitoring using remote sensing approaches (DE/EN)
- RS 3: Global Change and Biodiversity (DE/EN)
- RS 4: Multitemporal land cover monitoring and change detection (DE/EN)

Remote Sensing of Water Systems (RSWS)

- RSWS 1: Remote sensing of lakes and rivers / Fernerkundung von Seen und Flüssen (DE/EN)
- RSWS 2: Remote sensing of water cycle components / Fernerkundung von Wasserkreislaufkomponenten (DE/EN)
- RSWS 3: Remote sensing of environmental change / Fernerkundung von Umweltänderungen (DE/EN)

Spatial Genetics (SG)

- SG 1: Leveraging remote sensing to monitor biodiversity / Einsatz der Fernerkundung zur Überwachung der biologischen Vielfalt (DE/EN)
- SG 2: Remote sensing for resilient forests / Fernerkundung für widerstandsfähige Wälder (DE/EN)
- SG 3: Spatial data in sustainable agriculture / Geodaten in der nachhaltigen Landwirtschaft (DE/EN)
- SG 4: Precision pest management for pesticide reduction / Präzise Schädlingsbekämpfung zur Reduzierung von Pestiziden (DE/EN)

Human Geography

Labour Geography (LGG)

- LGG 1: Societal challenges in the world of work (DE/EN)
- LGG 2: Care work and social reproduction (DE/EN)
- LGG 3: Feminist Geographies (DE/EN)
- LGG 4: Geographies of precarious labour (DE/EN)
- LGG 5: Digital Geographies and Society (DE/EN)

Political Geography (PGG)

- PGG 1: Politische Ökologie: Konflikte um natürliche Ressourcen (DE/EN)
- PGG 2: Krieg und Frieden - War and Peace (DE/EN)
- PGG 3: Entwicklungshilfe und humanitäre Interventionen - Development Aid and Humanitarian Interventions (DE/EN)
- PGG 4: Extractivism and Development (EN)

Space, Nature and Society (SNS)

- SNS 1: Transformative change towards just sustainable futures (EN)
- SNS 2: Mensch-Natur-Beziehungen / Human-nature relationships (DE/EN)
- SNS 3: Alternative Zugänge im Naturschutz / Alternative approaches to nature conservation (DE/EN)

Social and Cultural Geography (SoKu)

- SoKu 1: Rental markets and urban exclusion (EN/DE)
- SoKu 2: Urban development processes: from vacancy to densification (EN)
- SoKu 3: Infrastructure politics and climate finance (EN/DE)

Economic Geography (WGG)

- WGG 1: Globale Warenketten: Ressourcen, Infrastrukturen und Märkte (DE/EN)
- WGG 2: Postwachstum und alternative Ökonomien (DE/EN)
- WGG 3: Plantation economy: Nature, labor and violence (DE/EN)
- WGG 4: Food Geographies: Globalisierung der Nahrungsmittelproduktion und ethischer Konsum (DE/EN)

Physical Geography

Soil Science and Biogeography (2B)

- 2B 1: Bio- und Pedosphäre im Wandel (DE/EN)
- 2B 2: Stoffkreisläufe im System Boden, Pflanze, Atmosphäre (DE/EN)
- 2B 3: Ressource Boden (DE/EN)

Glaciology, Geomorphodynamics Group (3G)

- 3G 1: Gletscher und Eisschilde (DE/EN)
- 3G 2: Permafrost, Oberflächenprozesse und Naturgefahren im Hochgebirge (DE/EN)
- 3G 3: Auswirkungen des Klimawandels und Anpassung an den Klimawandel (DE/EN)

Environment and Climate (Eclim)

GeoChronology (GCH)

- GCH 1: Boden- und Landschaftsdynamik (DE/EN)
- GCH 2: Datierungstechniken als Tool zur Landschafts- und Umweltrekonstruktion (DE/EN)
- GCH 3: Klima- und Umweltarchive (DE/EN)

Hydrology and Climate (H2K)

- H2K 1: Klimavariabilität und Wasserressourcen (DE/EN)
- H2K 2: Water in the critical zone (DE/EN)
- H2K 3: Globale und lokale Wasserkonflikte (und deren hydrologische Ursachen) (DE/EN)
- H2K 4: Wasserqualität (DE/EN)

Geographisches Institut

Geography Teacher Training (GTT)

- GTT 1: Educational inequalities in urban spaces (DE/EN)
- GTT 2: Geographie und Bildung: Fokus Humangeographie (DE/EN)
- GTT 3: Geographie und Bildung: Fokus physische Geographie (DE/EN)

GIScience

GeoComputation (GCO)

- GCO 1: Landschaftswahrnehmung in Texten/ Landscape perception in text (DE/EN)
- GCO 2: Partizipatives GIS, traditionelles und lokales Wissen in GIS/ Participatory GIS, traditional and local knowledge in GIS (DE/EN)
- GCO 3: Ziele für nachhaltige Entwicklung & GIS / Sustainable Development Goals & GIS (DE/EN)
- GCO 4: Crowdsourcing und Geographische Informationen/ Crowdsourcing and Geographic Information (DE/ EN)

Geographic Information Systems (GIS)

- GIS 1: Mobility Analytics for sustainable transport, health, and movement ecology [DE/EN]
- GIS 2: Language as a spatial phenomenon – migration, boundaries, and the environment [DE/EN]
- GIS 3: GeoAI: Artificial intelligence for geographic applications [EN]
- GIS 4: Geographic diffusion: studying the spread of innovations, languages, cultures or diseases in space and time [DE/EN]

Geographic Information Visualization and Analysis (GIVA)

- GIVA 1: Spatial Cognition and Behavioral Geography (DE/EN)
- GIVA 2: Geographic information visualization of uncertainty (DE/EN)
- GIVA 3: Location Privacy (DE/EN)
- GIVA 4: Designing for Diversity – Adapting to Individuals (DE/EN)