

Modules for guest lecturers/Eberswalde University for sustainable Development, Winter term 2026-2027

Module	Module Component	Goal	Language of instruction	Study programme	expected calendar week/ time***	teaching form	Mandatory or elective module
Faculty Forest and Environment							
Applied Programming in Forestry	Programming I	Students understand the theoretical fundamentals of computer programming and are able to create application programs of limited extent and function in a systematic way using an object-oriented programming language.	English	MA Forest Information Technology	04.01.2027-22.01.2027	Lecture, Practical exercise	mandatory
	Programming II	The students use computer programming techniques to analyze complex datasets from practical applications in environmental science and forestry. The students develop programs that handle with different data types and structures	English	MA Forest Information Technology		Lecture, Practical exercise	mandatory
Principles of Forest Information Technology	Principles of forest data structures	Students gain fundamental knowledge about forest data structures and their spatial and digital representation. They become familiar with IT based methods and techniques of relevance for forest science analysis and management	English	MA Forest Information Technology	05.10.2026-23.10.2026	Lecture, Practical exercise	mandatory
	Principles of GIS and Remote Sensing I	Students get an applied introduction to the use of geospatial data and technology in ecological and sustainable forest management and applied forest technology and more broadly in environmental sciences	English	MA Forest Information Technology		Lecture, Practical exercise	mandatory
Data and Statistics in Forestry	Forestry data structures and spatial data models	Students know theoretical fundamentals of databases and are able to plan and to implement databases and to retrieve especially spatial data from databases in client-server environments.	English	MA Forest Information Technology	26.10.2026-13.11.2026	Lecture, Practical exercise	mandatory
	Environmental spatial data analysis	The students perform statistical analyses of environmental spatial data. They know the advantages and disadvantages of different sampling strategies and monitoring concepts. Students are able to select appropriate statistical procedures and tests to find structures and relations in the data and to justify statements	English	MA Forest Information Technology		Lecture, Practical exercise	mandatory
Forest inventory and tree monitoring	Principles of forest inventories	Students know principal methods and concepts of inventories at different spatial scales and collect comprehensive information about the state and dynamics of forests for strategic and management planning	English	MA Forest Information Technology	30.11-11.12.2026	Lecture, Practical exercise	elective
	Examples of forest monitoring at tree- and stand level	Students gain an understanding of basic principles of tree growth and physiology in relation to changing environmental conditions. Based on this, outcomes of state-of-the-art forest monitoring systems are used to assess forest productivity, carbon budgets, and forest resilience to changing environmental conditions.	English	MA Forest Information Technology		Lecture, Practical exercise	elective
	Relevance of FIT for forest conservation & management	Students critically evaluate the relevance of long-term inventory and monitoring for decision making in forestry and environmental sciences	English	MA Forest Information Technology		Lecture, Practical exercise	elective

Approaches and tools for research and monitoring with geodata remote sensing	geodata and remote sensing as tools for spatial monitoring	Familiarize the students with the fundamental theoretical ideas and practical concepts for a long term monitoring framework in protected areas using geospatial data and remote sensing products	English	MA Forest Information Technology	16.11.2026-27.11.2026	Lecture, Practical exercise	elective
	Basics in monitoring and research	Presentation of the theoretical principles of quantitative research as well as spatial research and monitoring methods. Practical examples of application from research, monitoring and evaluation in the context of international protected areas. Inter- and transdisciplinary methods of knowledge management will be presented as well as innovative, digital methods of citizen science and communication via social media. Students learn the methods of empirical social research as well as scaled spatial analysis from the perspective of different actors in the context of protected areas.	English	MA Forest Information Technology		Lecture	elective
Fundamentals of measurements and modelling	sensors of automated measurements	The students identify and describe the measuring principles behind sensor technologies used as data sources for environmental modelling. They know the principles of data quality assessment and further data processing procedures that guarantee a meaningful re-use of the measured data.	English	MA Forest Information Technology & MA Global Change Management & MA Forest System Transformation	16.11.2026-27.11.2026	Lecture, Practical exercise	elective
	process modelling methodology	The students know about application areas of ecosystem models and are able to distinguish between different modelling concepts.	English	MA Forest Information Technology & MA Global Change Management & MA Forest System Transformation		Lecture, Practical exercise	elective
Innovative forest management methods	Innovative concepts and technology trends in forest management	Students get to know innovative concepts and technologies related to forest management and wood logistics and learn how to apply them in practice.	English	MA Forest Information Technology	19.10.2026-30.10.2026	Lecture, Seminar, Practical exercise	elective
Advanced Remote Sensing innovations (ARSI)	Remote sensing change detection principles	Students are enabled to use remote sensing and geographic information system in different applications related to forest protection and forest change detection.	English	MA Forest Information Technology	05.10.2026-16.10.2026	Lecture, Seminar	elective
Academic writing and presenting	academic writing and presenting	Students know the fundamentals of effective scientific writing and oral presenting.	English	Change Management & MA Forest Information Technology	30.11.2026-11.12.2026	Seminar	elective
	Introduction to resource uses and economic concepts	Students have a solid understanding of concepts and methods of environmental, ecological and natural resource economics. They are familiar with the dynamics of economic systems, functioning of markets, reasons for market failures and potential solutions. They are able to discuss the relevancy of these concepts for sustainable forest management and to optimise the use of forest resources, being aware of their respective chances and limitations.	English	MA Forestry System Transformation		Lecture, Seminar, Practical exercise	mandatory

Rethinking environmental economics I	Human wellbeing, ecosystem functions, services and valuation approaches	Students are enabled to understanding the ecosystem services concept, its background and rationales, as well as the current state of scientific research and policy. They are familiar with definitions, typologies, and frameworks that link ES to wellbeing, and with recent socio-political and scientific debates for mapping, indicators & valuation. Based on case study examples, they can analyse chances and challenges of the ES concept and distinct valuation approaches for political and economic decision-making, know about the challenges to communicate to the science-policy/practice interface, and are able to develop strategies for overcoming them.	English	MA Forestry System Transformation	05.10.2026-23.10.2026	Lecture, Seminar, Practical exercise	mandatory
Forest governance and policy I	Concepts, institutions and actors	Students understand, can explain and analyse environmental governance systems. Rooted in a new institutional economics and political sciences understanding, students can distinguish between governance structures, institutions, actors and organisations. In particular they are familiar with key policy and governance concepts relevant for sustainable natural resources management and use. Besides the deepening of dedicated governance systems, students are able to explain and handle multiple realities for collaboration, integrated and adaptive approaches, and conflict management.	English	MA Forestry System Transformation	04.01.2027-22.01.2027	Lecture, Seminar, Project	mandatory
	Environmental policy and nature conservation	Students are familiar with the general objectives, tools and current debates of environmental-, nature- and biodiversity conservation policy on different levels. They know the basic environmental governance structures, and the different policy instruments at stake to manage environmental problems. They are able to discuss the chances and limitations of these policy approaches in a nuanced way. For dedicated environmental policy arenas, students can analyse central actors, inherent problem perceptions and ideas for policy solutions. They are able to analyze participatory governance in different policy fields.	English	MA Forestry System Transformation		Lecture, Seminar, Project	mandatory
Project management and communication	project design and management	The module component helps students to plan their own transformation project of moderate size related to the study program's content. It takes them step by step from the first idea to a detailed project concept. Students acquire further skills in interdisciplinary scientific work and self-management.	English	MA Forestry System Transformation	21.09.2026-25.09.2026	seminar, project	mandatory
	communication and dissemination	Students get to know strategies for scientific communication, moderation and marketing. They are able to communicate results to expert and lay audience and get to know a range of dissemination strategies and media.	English	MA Forestry System Transformation		seminar, project	mandatory
Applied silviculture, ecosystem restoration and forest inventory	Applied silviculture and ecosystem development and restoration	Students are enabled to develop, evaluate and put into practice forest management strategies and treatment programs based on socio-economic information and knowledge of forest ecology, forest growth theory, site assessment and silviculture. Specific silvicultural techniques are known and can be applied to concrete situations in forest stands (both tropical/subtropical and temperate zones) according to the given objectives of the forest operator/owner. Students learn about the possibilities and limits of promoting forest development after calamities and under conditions of climate change. They are able to critically reflect on corresponding heuristics for the promotion of ecosystem functionality.	English	BA International Forest ecosystem management		lecture, practical exercise	mandatory

Tourism in the environmental, social and cultural dimensions		Impacts and solutions of tourism in the environmental dimensions Basic principles of sustainable development and their application to tourism, development and forms of sustainable tourism Environmental dimension: impacts and solutions in the area of climate change and biodiversity. Importance of the landscape for tourism Social dimension: focus on human and children's rights, labour conditions and workers' rights, gender & diversity in tourism, corporate social responsibility Cultural dimension: definition of culture, cultural heritage, identity. Interrelationship with tourism. Interculturality. Importance of cultural heritage. Case studies	English	Sustainable Tourism Management	28.09.2026-09.10.2026	Lecture, Seminar	mandatory
Tourism economics, digital transformation and ethics		Familiarisation with and in-depth understanding of the tourism industry and its value creation stages with an economic focus In-depth study of digital business models, the internet economy, platform economy and the effects of digital transformation Consideration of new economic approaches such as the economy for the common good or social entrepreneurship in the context of tourism development Discussion of critical economic approaches and ethical aspects of digitalisation, the economy and the tourism industry	English	Sustainable Tourism Management	12.10.2026-23.10.2026	Lecture, Seminar	mandatory
Sustainable Marketing Management		Building on marketing fundamentals by developing the structure, manifestations, differentiation and special features of tourism marketing Marketing conception, planning, segmentation, positioning, communication and distribution as a strategic marketing approach Structure, forms and special features of tourism marketing Digital marketing measures, strategic fields of application and controlling Digital marketing tools, mobile marketing and performance marketing as well as social media marketing, de-marketing best practices	English	Sustainable Tourism Management	25.01.2027-05.02.2027	Lecture, Seminar	mandatory
Sustainability in destination management		Destination, Destination Management Organisation (DMO) Levels of spatial planning in Germany Environmental impact assessment and impact regulation Tourism planning as a task of destination management - planning versus management, categorisation and differentiation (e.g. from tourism marketing) Development of tourism concepts: supply analysis (building blocks of a tourism offer), demand analysis (indicators, data sources, development trends), analysis of current target groups, market/competition analysis, SWOT analysis as an evaluation tool, mission statement and development goals, action and measure plan, case studies, Sustainability in destination development: Indicators, evaluation approaches and practical implementation Institutional sustainability at DMOs Competitions as an activation tool Sustainable mobility	English	Sustainable Tourism Management	16.11.2026-27.11.2026	Lecture, Seminar	mandatory
Data Literacy		Overview of data literacy in the tourism context from the creation of data to the communication of results in the context of the tourism value chain Independent work with data Development of an infographic or storytelling with data for a self-selected topic	English	Sustainable Tourism Management	04.01.2027-15.01.2027	Lecture, Seminar, Project	mandatory

Communication and teamwork for sustainable development		Communication theories, communication techniques and communication styles, conflict resolution strategies, role plays, intercultural communication, development of learning and communication potential, environmental communication, teamwork techniques, practical exercises, basic rules of behaviour in research communication	English	Biosphere Reserve Management	28.09.2026-16.10.2026 (15.&16.10. = exam days)	Lecture, Seminar, Project	mandatory
Political, legal and international framework conditions for UNESCO biosphere reserves		International organisations, UNESCO, history of UNESCO, international environmental agreements and conventions, sustainability goals (SDGs), MAB programme, institutional framework conditions and coordination mechanisms of the programme, nature conservation law in different countries, BRs as model areas, establishment and conservation of biosphere reserves and differentiation from other protected area categories, organisations in the environment of biosphere reserves, Trounsboundary Parks	English	Biosphere Reserve Management	26.10.2026-13.11.2026	Lecture, Seminar, Project	mandatory
Fundamentals of the functionality and modification of systems		Students are enabled to understand the natural functional structures and organisations relevant to biosphere reserves as complex systems. This involves understanding emergent properties and the inherently indeterminate dynamics of ecological and social systems as well as the key attributes required for sustainable functioning. Students discuss analogies and homologies of social and ecological systems as well as the weaknesses and strengths of the socio-ecological systems approach. They are able to derive requirements and limits of the management of complex systems.	English	Biosphere Reserve Management	04.01.2026-22.01.2026	Lecture, Seminar	mandatory
Projektmanagement& Innovation		Innovation & innovation promotion, basics & definitions of project management, problem analysis, problem tree / solution tree, planning methods, target planning, financial planning, time planning, DIN process descriptions, project phases, project team & roles, controlling, monitoring, adaptive management, agile planning, open standards for the practice of conservation, organisational development projects & change management, PM software, evaluation, donor landscape, application formats of various donors	English	Biosphere Reserve Management	30.11.2026 - 18.12.2026	Lecture, Seminar, Project	mandatory
Approaches and tools for research & monitoring using empirical social research methods		Basics of monitoring & research Presentation of theoretical principles of quantitative and spatial research and monitoring methods, practical examples of research, monitoring and evaluation in the context of international protected areas. Inter- and transdisciplinary methods of knowledge management as well as innovative, digital methods of citizen science and communication using social media are presented. Students learn the methods of empirical social research as well as scaled spatial analytics from the perspective of different actors against the backdrop of protected areas. Empirical social research Research design (cross-sectional, longitudinal, exp. designs), qualitative data collection, qualitative sampling, quantitative data collection, quantitative sampling, qualitative data analysis, Maxqda software, additional focus on evaluation if necessary	English	Biosphere Reserve Management	17.11.2026 - 27.11.2026	Lecture, Seminar	elective

Approaches and tools for research & monitoring with geodata and remote sensing		Basics of monitoring & research Presentation of theoretical principles of quantitative and spatial research and monitoring methods, practical examples of research, monitoring and evaluation in the context of international protected areas. Inter- and transdisciplinary methods of knowledge management as well as innovative, digital methods of citizen science and communication using social media are presented. Students learn the methods of empirical social research as well as scaled spatial analytics from the perspective of different actors against the backdrop of protected areas. Geodata and remote sensing as instruments for spatial monitoring Students are familiar with the practical approach and methodological significance of specialised geodata at different scales and create specialised products for monitoring habitat types and communicating nature conservation results using analytical geostatistics and web-based cartography. The practice-orientated specialist seminar teaches innovative working methods for working with geodata in protected areas using practical examples and discusses the use of current remote sensing sensors, spatial monitoring methods and the use of professional services and products for continuous landscape-ecological spatial observation.	English	Biosphere Reserve Management	17.11.2026 - 27.11.2026	Lecture, Seminar	elective
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