

## KIT Summer School 2026 – Land Use & Ecosystem Change

Garmisch-Partenkirchen, Germany | 3 – 12 August 2026



**Overview:** Food and energy demands from a growing global population, combined with rapidly changing lifestyles, are placing unprecedented pressure on land and ecosystems. At the same time, land is increasingly expected to deliver a wide range of ecosystem services, often under the destabilising influence of climate change, which can significantly modify plant productivity. These overlapping and sometimes conflicting demands represent one of the central challenges to achieving long-term sustainability.

The Karlsruhe Institute of Technology (KIT) - Campus Alpin in Garmisch-Partenkirchen, offers a 7.5 day international Summer School (3 ECTS) on *land use and ecosystem change*. Participants will learn about a wide range of issues related to land use change, socio-ecological systems, ecosystem functioning, and modelling techniques. Lectures will cover the following topics:

1. Approaches to modelling future land use change
2. Land use change processes and drivers across time and space through observational data
3. Analysing management techniques, social networks, and historical context
4. Modelling ecosystem functioning and environmental change
5. The role of tipping points, risk management, and resilience in ecological systems
6. Climate and social change effects on biodiversity, habitats, and ecosystem services
7. How land use and ecosystem change fit into international assessment processes and policies

**Teaching team:** Prof. Dr. Almut Arneth, Prof. Dr. Mark Rounsevell, and other researchers. For more information on us see: <https://lemg.imkiflu.kit.edu/> and <https://landchange.imk-ifu.kit.edu/>

**Format:** The summer school includes a mix of lectures, group and individual exercises, student presentations, and a 1-day field trip focussing on land use change in the Alps.

**Costs:** The KIT Summer School is free of charge, and it includes lunches, materials and the field excursion. Travel and accommodation need to be covered by the applicant.

**Applications:** We accept applications from MSc and PhD students in environmental sciences, geography, economics, geo-ecology, meteorology, and ecology. Limited to 35 spots for 2026.

**Apply by April 11, 2026** through <https://indico.kit.edu/event/5458/>

This summer school contributes to the objectives of the Future Earth Global Land Programme (GLP) and the Analysis & Integrated Modelling of the Earth System (AIMES).