

# The use of Geographic Information Systems (GIS) in the context of Permaculture Design, Nature Conservation and Environmental management

This course is designed for students who have little or no prior experience with GIS, regardless of their skill level or experience in permaculture or other disciplines. With GIS, you can create more efficient and effective systems by capturing, storing, analyzing, and presenting geographic information. GIS enables users to observe from a wider angle and combine views that are invisible to the naked eye, providing a comprehensive approach to project design.

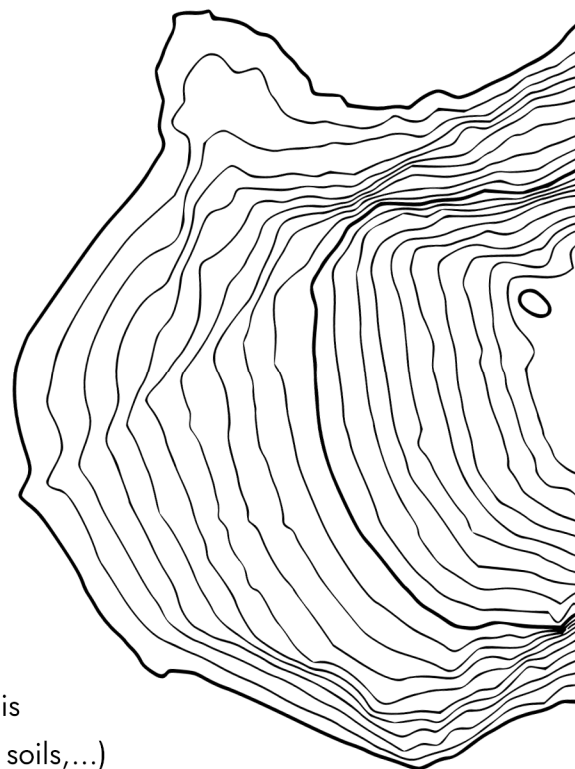
By learning these skills, students will gain additional knowledge that can help them design better permaculture, nature conservation, or environmental management projects. Participants will receive a detailed handbook that will serve as a valuable guide for future projects.

## Course content | Module 1

- + GIS and mapping theory
- + Digital mapping: digitizing the real world
  - creating editable & holistic maps
- + Data acquisition & access: open-source GIS data
- + Terrain visualization basics
- + Making Maps: visualizing and exporting your outputs

## Course content | Module 2

- + GIS and mapping theory
- + Digital mapping: digitizing the real world
  - creating editable & holistic maps
- + Data acquisition & access: open-source GIS data
- + Site assessment & Terrain analysis: applying environmental analysis
  - to facilitate decision-making processes (climate, slope, soils,...)
- + Network | Vicinity Analysis
- + Watersheds and Streams I.
- + Remote sensing: satellite / areal imagery and its applications
  - deriving plant health, soil moisture, fires, etc.
- + 3D visualization
- + GIS FieldOps: using GPS databases
- + Making Maps: visualizing and exporting your outputs



## Organisation

- |            |                     |         |                         |
|------------|---------------------|---------|-------------------------|
| + Language | english             | + When  | ongoing                 |
| + Duration | Module 1: 3 h       | + Where | online                  |
|            | Module 2: 12 h      | + How   | guided hands-on lecture |
| + Tuition  | country dependent ! |         | practical tasks         |
|            | contact for quote   |         | certification           |

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