

**GIS Applications in Wildlife Management**  
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**Course outline**

4 CFU in total (2 CFU lectures and 2 CFU practical activities)

The aim of the course is to provide theoretical and practical knowledge for an efficient and conscious use of modern digital cartography tools (Geographic Information Systems) in wildlife management and conservation of natural resources. As an example, in this context, a GIS enables to manage spatial data on wildlife distribution and density, movements and habitat use patterns, and environmental variables (climate, landcover, etc.). Data can be mapped and analysed, which can provide valuable information for the development of management strategies.

The theoretical foundations on which digital cartography is based will be provided, to initiate the student to use GIS technologies to real problems, with particular reference to the use of vector and raster data in contexts connected to management and conservation biology. Theoretical lessons and examples of the use of GIS will be alternated to practical exercises for managing, analyzing, and visualizing wildlife data.