## Learning Objectives:

By the end of this course, you'll be able to:

1. Understand GIS Fundamentals:
    o Grasp the core concepts of GIS, including spatial data, coordinate systems and map projections.
    o Explore the history and evolution of GIS technology.
2. Navigate ArcGIS Pro:
    o Familiarize yourself with the ArcGIS Pro interface.
    o Learn how to load and visualize spatial data layers.
3. Data Input and Editing:
    o Acquire data from various sources (e.g., shapefiles, databases, online services).
    o Edit and manipulate spatial data using ArcGIS Pro's editing tools.
4. Spatial Data Structures:
    o Dive into vector and raster data models.
    o Understand the structure of shapefiles, geodatabases, and feature classes.
5. Analytical Functions of GIS:
    o Perform basic geospatial analyses, such as buffering, overlay, and proximity analysis.
    o Explore spatial relationships and query data using attribute-based filters.
6. Cartography and Map Design:
    o Apply cartographic principles to create visually appealing maps.
    o Customize symbology, labels, and layout elements.
7. Data Output and Visualization:
    o Generate high-quality maps for reports, presentations, and publications.
    o Export maps in various formats (PDF, image files, etc.).

## Hand-On Practice:

Throughout the course, you will engage in hands-on exercises using QGIS. These practical sessions will reinforce your understanding of GIS concepts and allow you to implement the above-mentioned functionalities.