esri UK

Training Course Outline

Training the GIS Professional

Working with LiDAR Data in ArcGIS - 1 day

Overview

Master the basics.

This course introduces light detection and ranging (LiDAR) data concepts, collection methods, quality-control considerations, and common applications. Techniques to manage, edit, visualise, and share LiDAR-derived 2D and 3D information products using ArcGIS Pro are covered.

The course content is the same as the course offered by Esri Inc but the exercises will use UK data.

Who should attend

- GIS Analysts
- GIS Users
- Imagery Analysts
- GIS Professionals

Goals

- Validate the quality and accuracy of LiDAR data.
- Edit LiDAR data to correct errors.
- Organise, process, visualise, and share LiDAR data using ArcGIS LAS datasets, mosaic datasets, and point cloud scene layers.
- Derive useful information products from LiDAR data, including raster surfaces, building footprints, and vegetation estimates.

Topics Covered

- Exploring LiDAR data: What is LiDAR? LiDAR returns; LiDAR quality; Examine LiDAR attributes; LiDAR classification; Collecting LiDAR data; Storing LiDAR data.
- Using LiDAR data in ArcGIS Pro; LAS files in ArcGIS; Managing LiDAR data in ArcGIS; Choosing a LiDAR data type; What is a LAS dataset? Identify Surface constraints
- Creating surfaces; Common surface models; Creating a raster surface from LiDAR; Output resolution; Interpolating output cell values; What is a mosaic dataset? Pros and cons of managing LiDAR data with mosaic datasets; Managing LiDAR data in a mosaic dataset
- Modifying LiDAR data; Why edit? Editing methods; LiDAR editing considerations; Choosing an editing method
- Creating and sharing 3D layers with LiDAR; The power of 3D; using 3D features; 3D geometries; Creating 3D buildings; Challenges with sharing LiDAR; Sharing 3D layers

Prerequisites

Course attendees should have proficient ArcGIS Pro (or equivalent knowledge) which can be gained by attending one of the following courses:

Introduction to ArcGIS Pro for GIS Newcomers
OR Migrating from ArcMap to ArcGIS Pro

Contact Us

For GIS training enquiries and bookings visit esriuk.com/learning, email us at learning@esriuk.com or call us on 01296 745504

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