

## Training the GIS Professional

# Graph Analytics Using ArcGIS Knowledge - 2 days

### Overview

Get started with graph analytics in ArcGIS.

This course introduces foundational concepts, terminology, and workflows to perform graph analysis using ArcGIS Knowledge. Learn how to visualise and analyse spatial, nonspatial, structured, and unstructured data together in a knowledge graph, and build skills to combine graph analysis with spatial analysis to uncover relationships and hidden patterns in large amounts of data.

GIS analysts, all-source analysts, intelligence analysts, researchers, data scientists, and others who need to analyse data stored in multiple formats to find answers to complex questions will benefit from attending this course.

### Goals

- Model data for use in ArcGIS Knowledge.
- Use ArcGIS Knowledge to load data into a knowledge graph and query the knowledge graph.
- Manage and analyse data using a knowledge graph in ArcGIS Pro.
- Visualise and share graph analysis results.

### Prerequisites

Completion of Introduction to ArcGIS Pro for Newcomers or equivalent working knowledge

### Contact Us

For GIS training enquiries and bookings visit [esriuk.com/learning](https://esriuk.com/learning), email us at [learning@esriuk.com](mailto:learning@esriuk.com) or call us on 01296 745504

### Topics Covered

- Introducing ArcGIS Knowledge: Introduction to ArcGIS Knowledge; ArcGIS Knowledge in the ArcGIS Enterprise environment; What can you do with ArcGIS Knowledge? Using knowledge graphs in your work; The ArcGIS Knowledge investigation.
- Modeling data: Data modeling; The data modeling workflow; Knowledge graph elements; Classifying elements of a data model; Drawing a data model.
- Preparing data: Supported data types; Data preparation; Evaluating structured data; Approaches for preparing unstructured data; Preparing unstructured data.
- Loading data: Data loading methods; Loading data in ArcGIS; Adding supporting information to a knowledge graph; Investigating data in a knowledge graph.
- Managing data: Knowledge graph data management; Automating data management for a knowledge graph
- Performing graph analysis: Graph analysis with ArcGIS Knowledge; Types of graph analysis; Choosing a type of graph analysis; Interpreting graph analysis results.
- Querying data: Finding information in a knowledge graph; The openCypher query language; Identifying parts of a query; Using graph queries; Using spatial operators in queries
- Conducting spatial analysis: Spatial analysis with a knowledge graph; Using data from multiple sources for analysis.