

# Raster Analysis

Level: Advanced

Duration: 30 h

## LESSONS

[Spatial Interpolation with ArcGIS Pro | Esri Training Seminar](#)

- Duration: 1hr

[ArcGIS Pro: Image Analysis, Processing, and Exploitation | Esri Training Video](#)

- Duration: 50 mins

[Prediction, Trend, and Change Analysis Using Multidimensional Raster Data | Esri Training Video](#)

- Duration: 40mins

[Distance Analysis: Identifying Optimal Paths Using Rasters | Esri Training Video](#)

- Duration: 45mins
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## EXERCISES

[Calculate impervious surfaces from spectral imagery | Learn ArcGIS](#)

- Duration: 1h 30min
- Requirements: ArcGIS Pro 2.7, Spatial Analyst

[Terrain Analysis Using ArcGIS Pro | Esri Training Web Course](#)

- Duration: 2hrs 45min
- Requirements: ArcGIS Pro 2.7, Spatial Analyst

[Geostatistical Interpolation: Introduction | Esri Training Web Course](#)

- Duration: 1h 40min
- Requirements: ArcGIS Pro 2.7, ArcGIS Geostatistical Analyst

[Geostatistical Interpolation: Using Empirical Bayesian Kriging and EBK Regression Prediction | Esri Training Web Course](#)

- Duration: 3hrs 45min
- Requirements: ArcGIS Pro 2.7, ArcGIS Geostatistical Analyst, ArcGIS Spatial Analyst

[Geostatistical Interpolation: Reaggregating Data Using Areal Interpolation | Esri Training Web Course](#)

- Duration: 3hrs 45min
- Requirements: ArcGIS Pro 2.7, ArcGIS Geostatistical Analyst

[Geostatistical Interpolation: Creating a 3D Prediction Surface | Esri Training Web Course](#)

- Duration: 3hrs 20min
- Requirements: ArcGIS Pro 2.7, ArcGIS Geostatistical Analyst

### [Model water quality using interpolation | Learn ArcGIS](#)

- Duration: 1h 20min
- Requirements: ArcGIS Pro 2.7, ArcGIS Geostatistical Analyst

### [Performing Viewshed Analysis in ArcGIS Pro | Esri Training Web Course](#)

- Duration: 1h
- Requirements: ArcGIS Pro 2.7, 3D Analyst, Spatial Analyst

### [Introduction to Image Classification | Esri Training Web Course](#)

- Duration: 1h 15min
- Requirements: ArcGIS Pro 2.7, Spatial Analyst

### [Performing Unsupervised Pixel-Based Image Classification | Esri Training Web Course](#)

- Duration: 55min
- Requirements: ArcGIS Pro 2.7, Spatial Analyst

### [Performing Supervised Object-Based Image Classification | Esri Training Web Course](#)

- Duration: 1h 15min
- Requirements: ArcGIS Pro 2.7, Spatial Analyst

### [Performing Supervised Pixel-Based Image Classification | Esri Training Web Course](#)

- Duration: 1h 10min
- Requirements: ArcGIS Pro 2.7, Spatial Analyst

### [Performing Accuracy Assessment for Image Classification | Esri Training Web Course](#)

- Duration: 50min
- Requirements: ArcGIS Pro 2.7, Spatial Analyst

### [Suitability Modeling: Introduction | Esri Training Web Course](#)

- Duration: 2 hrs 40 min
- Requirements: ArcGIS Pro 2.7, Spatial Analyst

### [Suitability Modeling: Creating a Weighted Suitability Model | Esri Training Web Course](#)

- Duration: 4hrs 15min
- Requirements: ArcGIS Pro 2.7, Spatial Analyst

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## OTHER MATERIALS

Document: [Getting to Know ArcGIS Image Analyst | Esri Training Document](#)

Additional exercises:

### [Interpolate 3D oxygen measurements in Monterey Bay | Learn ArcGIS](#)

- Duration 2hrs
- Requirements: ArcGIS Pro 2.7, ArcGIS Geostatistical Analyst, ArcGIS 3D Analyst extension

### [Classify land cover to measure shrinking lakes | Learn ArcGIS](#) (1h 15min)

### [Analyze urban heat using kriging | Learn ArcGIS](#)

- Duration: 1h 30min
- Requirements: ArcGIS Pro 2.7, Geostatistical Analyst