



# Certification Exam Guide

ArcGIS Desktop Associate 10.5



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# CONTENTS

<a href="#">Exam Catalog Page</a>	1
<a href="#">Description</a>	2
<a href="#">Qualifications</a>	3
<a href="#">Skills Measured</a>	5
<a href="#">Preparation Resources</a>	8

## EXAM CATALOG PAGE

**Title:**

ArcGIS Desktop Associate 10.5

**Language:**

English

**Duration:**

2 hours

**Price:**

\$250



## DESCRIPTION

The ArcGIS Desktop Associate exam tests the candidate's experience applying ArcGIS concepts and processes to workflows. Candidates should demonstrate proficiency when using ArcGIS to visualize, manage, and analyze geospatial data. Qualified candidates should have two or more years of applied experience, and should be proficient in best practices and uses of Esri's ArcGIS technologies.

## QUALIFICATIONS

A qualified candidate should be able to perform the following tasks:

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- Apply advanced map visualization (quantitative and qualitative) and cartographic methods and techniques
- Construct a map using available datasets and services
- Create new spatial datasets from analysis of existing datasets
- Work with layer properties and tables, and apply editing workflows
- Describe the basic types of geographic data
- Select the datasets necessary to perform a specific analysis
- Author and share content online
- Share data through layer and map packages
- Convert data from different formats
- Evaluate the suitability of a dataset
- Use an existing model or script
- Manipulate data between different projections
- Apply established workflows to correct issues with projections and transformations in ArcGIS Desktop
- Manipulate time-enabled data
- Enable and use editor tracking
- Author Python expressions from a list of available functions
- Publish hosted layers
- Share content to apps across the ArcGIS Platform
- Create a model for a repeatable process
- Use ArcGIS Pro tasks
- Use ArcGIS Online maps and apps

A qualified candidate should be familiar with the following tools:

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- ArcGIS Platform components
- ArcGIS Desktop (ArcCatalog 10.5, ArcMap 10.5 and ArcGIS Pro 1.4)
- ArcGIS Spatial Analyst extension
- ArcGIS Network Analyst extension
- ArcGIS 3D Analyst extension
- ArcGIS Enterprise 10.5
- ArcGIS Online
- Collector for ArcGIS

A qualified candidate should NOT be expected to perform the following tasks:

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- Administer a database
- Administer ArcGIS Enterprise
- Author ArcGIS Pro tasks
- Create advanced database structures
- Troubleshoot computer/network systems upon which ArcGIS Desktop is implemented
- Python programming

## SKILLS MEASURED

The following list will familiarize candidates with the exam sections to help guide exam preparation. The relative weight of each section is provided to illustrate the vapproximate size of each section. Candidates should review this list and assess their knowledge of each skill. Specific preparation resources are available to assist with refreshing in areas where any knowledge gaps are found.

### Data Management

36%

- Compare and contrast various types of vector and raster datasets supported in ArcGIS
- Choose and apply an appropriate coordinate system to preserve the desired spatial properties
- Given a scenario, determine how to convert and load data into a geodatabase
- Apply spatial and attribute data validation
- Given a scenario, determine which geodatabase type to use
- Given a scenario, determine how ArcGIS platform components are used to manage data
- Given a scenario, determine the appropriate existing geodatabase elements to use
- Manage raster data
- Manage tables
- Manage vector data
- Determine how to maintain item metadata

### Data Manipulation

20%

- Use the editing workflow to create, modify, and delete 2D and 3D features
- Resolve the root cause of a data alignment problem

- Given a scenario, determine appropriate loading process, tools, and environment for loading data into a feature class or table
- For a given scenario, apply a SQL query
- Determine how to repair a broken data source
- Determine how to evaluate and repair data

## Visualization

11%

- Identify how to control the coordinate system and geographic transformation in ArcGIS Desktop
- Manage layer properties
- Determine how to visualize temporal, ranged, or 3D data

## Sharing

13%

- Identify how to export data and maps to different formats
- Choose how to share content across the ArcGIS Platform
- Identify the purpose for metadata and properties required for sharing
- Determine how to create and manage map layouts and map book

## Analysis and Geoprocessing

20%

- Compare the properties of relates, relationship classes, joins, and spatial joins
- Given a scenario, determine the appropriate geoprocessing tool to use
- Given a complex workflow, use ArcGIS Pro tasks, batch processing or models
- Select an appropriate coordinate system for a given analysis
- Identify analysis tools available from ArcGIS Online
- Identify ArcGIS Enterprise portal-based analysis services
- Apply raster functions for raster and image processing



A qualified candidate should be familiar with the following software:

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- ArcGIS Desktop (ArcCatalog 10.5, ArcMap 10.5 and ArcGIS Pro 1.4)
- ArcGIS Spatial Analyst
- ArcGIS Network Analyst
- ArcGIS 3D Analyst
- ArcGIS Enterprise 10.5
- ArcGIS Online
- Collector for ArcGIS

## PREPARATION RESOURCES

The following training resources are available to help you prepare for your exam but are not required. Please utilize this list of preparation resources with the list of “skills measured” topics so you can identify appropriate training options for any possible knowledge gaps.

Please note that completing the recommended training courses does not guarantee that you will achieve the requirements for a specific certification exam.

### Learning Plan

Esri ArcGIS Desktop Associate Certification 10.5

### Books from Esri Press

Getting to Know ArcGIS, Fourth Edition

Lining Up Data in ArcGIS: A Guide to Map Projections, Second Edition

Getting to Know ArcGIS Pro

### Other Online Resources

ArcGIS Desktop: Documentation