



EXAM INFORMATION GUIDE

ArcGIS Desktop Professional

19-001



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EXAM DESCRIPTION

Title:

ArcGIS Desktop Professional 19-001

Category:

Core Exam

Description:

The ArcGIS Desktop Professional exam tests the candidate's experience applying ArcGIS concepts and processes to workflows. Qualified candidates should have four years of applied experience and should be proficient in best practices and uses of the ArcGIS Platform. Qualified candidates should demonstrate proficiency when applying advanced GIS concepts and knowledge to establish workflows, processes, troubleshooting non-routine issues, and be skilled at defining and successfully completing complex GIS projects.

Software:

ArcGIS Pro
ArcGIS Online
ArcGIS Enterprise
ArcGIS Network Analyst
ArcGIS Spatial Analyst
ArcGIS 3D Analyst
ArcGIS Image Analyst
Python
Arcade

Language:

English

Duration:

2 hours

Price:

\$250

CANDIDATE QUALIFICATIONS

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

- Apply and interpret fundamental spatial statistics and 2D and 3D visualization techniques
- Build a reference data set and an address locator
- Build a transportation network and apply solvers
- Implement and apply Python scripting
- Perform advanced vector and raster analysis
- Perform fundamentals of geodatabase design and operate within a multi-user geodatabase
- Perform surface modeling and analysis
- Utilize advanced modeling techniques
- Identify and resolve common workflows
- Author a mosaic dataset
- Demonstrate proficiency in desktop user interface and environment configuration
- Determine and define an appropriate coordinate system
- Manipulate data with Spatial Analyst, 3D Analyst, Image Analyst, and Network Analyst extensions
- Author and share to a web GIS portal
- Implement and apply web content or services to perform analyses
- Configure web app templates and Web AppBuilder widgets
- Author ArcGIS Pro Tasks
- Author and use Arcade Expressions

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

- Deliver production quality cartographic output with specific industry solutions
- Administer a multi-user geodatabase
- Develop or administer Web sites
- Develop tools or apps using any SDK or API
- Network or systems administration
- Administer an ArcGIS Online organization

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 approximate 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 Storage

20%

- Given requirements for a specific project, determine how to design a geodatabase
- Select appropriate data formats for an intended use
- Determine the data, settings, and parameters for creating a complex data set
- Determine the data, settings, and parameters for creating an address locator

Data Management

29%

- Given a scenario, convert and aggregate data to an appropriate format
- Given a scenario, create a dataset with the necessary schema to support an operation
- Determine the best workflow to resolve data alignment issues
- Determine how to manage coordinate systems
- Given a scenario, determine the method to create a surface dataset
- Given a scenario, determine how to automate data management

Visualization & Sharing

27%

- Use advanced cartographic techniques across the ArcGIS platform
- Given a scenario, determine how to optimize rendering of maps across the platform
- Given a scenario, determine how to create and render 2D and 3D scenes
- Given a scenario, identify procedures to create and publish layers, maps, and apps
- Given a scenario, determine the most effective process for sharing content
- Given a scenario, determine how to automate visualization and sharing using ArcPy

Analysis & Geoprocessing

24%

- Determine how to use Python to automate a process in ArcGIS
- Determine how to create and edit ModelBuilder models to automate complex workflows
- Given user requirements, determine the best way to share a geoprocessing model, script, package, or toolbox
- Determine how to customize the ArcGIS Pro user interface
- Determine how to author Tasks in ArcGIS Pro
- Given a scenario, determine the workflow, data, tools, settings, and parameters to perform an analysis

EXAM 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.

The Esri curated Learning Plan for this exam is updated continually based on the Training Services course and content retirement schedule.

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

ESRI LEARNING PLAN

- [Esri ArcGIS Desktop Professional Certification 19-001](#)

BOOKS AND ADDITIONAL SOURCES

- [The ArcGIS Book - 10 Big Ideas about Applying the Science of Where](#)
- [Getting to Know Web GIS, 3rd edition](#)
- [Getting to Know ArcGIS Pro, second edition](#)
- [The Foundation for Your GIS - ArcGIS Pro](#)
- [GeoNet - Ask ArcGIS Pro](#)