

# ArcGIS API for Python Specialty

20-001

## Exam Details:

ArcGIS API for Python Specialty

- Exam Questions: 40
- Exam Type: Specialty
- Exam Format: Multiple Choice
- Exam Language: English
- Exam Cost: \$150 USD

## Exam Purpose:

The ArcGIS API for Python Specialty exam tests the candidate's experience and basic understanding of the ArcGIS Platform with deeper understanding and experience using ArcGIS API for Python to automate web GIS.

## Target Candidate Audience:

The ArcGIS API for Python Specialty exam is for candidates who have the ability to use ArcGIS API for Python to automate content management tasks, as well as, use the API to complete analysis and data science workflows.

## Description of Qualified Candidate:

The ArcGIS API for Python Specialty exam is designed for candidates who have at least one year of ArcGIS API for Python knowledge including experience with web GIS (querying content, organization management, publishing content, spatial analysis, etc.), python fundamentals (working with Python's built-in capabilities, writing functions, flow control, data types etc.), and familiarity with an IDE (such as Jupyter Notebook, IDLE, ArcGIS Pro Python Console).



# CANDIDATE QUALIFICATIONS

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

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- Apply symbology
- Query content and layers
- Display webmaps
- Add content to webmaps and webscenes
- Publish and overwrite
- Access feature attributes
- Analyze patterns
- Edit features and records
- Clone content
- Create views
- Perform spatial analysis
- Build webmaps
- Manage content
- Use Jupyter Notebook environment
- Use Pandas
- Recognize and interpret JSON

A qualified candidate should NOT be familiar with the following:

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- Set up Jupyter notebook server
- Distributed collaboration
- Program paradigms
- Deep-learning related tech
- Administrator workflow (i.e., administration of users)
- Jupyter Lab environment
- Algorithms
- Tasks requiring a license (network analysis)
- Install and setup of Python environment (Conda, Notebook, etc.)
- ArcPy
- Clone users and groups
- ArcGIS administration server modules
- Perform workflows specific to ArcGIS Enterprise or ArcGIS Online environments

A qualified candidate should be familiar with the following tools:

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- ArcGIS Online
- ArcGIS Enterprise

## SKILLS MEASURED

Candidates should fully prepare for testing using the exam content sections below as a checklist to identify possible gaps between their knowledge and the skills measured by the exam. The relative weight illustrates the approximate size of each section. It is recommended that focused preparation should be in areas where any knowledge gaps are found.

### Discover and Share

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40%

- Use the gis and features modules to apply procedural concepts to connect to the ArcGIS organization and manage content
- Use the gis and featured modules with a set of requirements to publish items

### Visualize

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33%

- Use the gis, features, mapping, and widgets modules to create and edit web map layers
- Use the gis, features, mapping, geocode, and geometry modules to visualize map content

### Analyze

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27%

- Use the features and geometry modules and their submodules to perform spatial analysis
- Use the GeoAccessor and GeoSeriesAccessor modules to utilize Spatially Enabled DataFrame

# RESOURCES

These training resources along with the list of exam objectives may be used to identify appropriate training options for any possible knowledge gaps but are not required.

The Esri curated exam Learning Plan is updated continually based on Esri Academy courses and the content retirement schedule.

Please note that completing the recommended training courses does not guarantee a passing score on a specific certification exam.

## LEARNING PLAN

- [Esri ArcGIS API for Python Certification 20-001](#)