

A topographic map of the United States showing elevation. The map uses a color gradient from blue (low elevation) to red and purple (high elevation). The Rocky Mountains and Sierra Nevada ranges are prominent in the western and central US, while the Appalachian range is visible in the eastern US. The Great Plains are shown in yellow and orange, indicating moderate elevation. The text "ESRI Technical Certification Overview" is overlaid in the upper left quadrant.

ESRI Technical Certification Overview

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Why have certification by ESRI?

- It communicates your proficiency in ESRI software
- Similar to Microsoft Certification, it can offer employers a standard to reference when evaluating candidates for positions
- The skills covered by each level of certification are well-defined



Do I need both a technical certification and the GIS-P?

- They are two different measures of your qualifications
- The GIS-P focuses more on your career, your education, your contribution to the industry – and it is NOT software specific
- ESRI Technical Certification is validation of your technical proficiency with ESRI software



Current Certifications

Overview of Certifications offered

Desktop	ArcGIS Desktop	Associate Professional
Developer	ArcGIS Desktop Developer	Associate * Professional *
	Web Application Developer	Associate Professional *
	Mobile Developer	Associate * Professional *
Enterprise	Enterprise Geodatabase Management	Associate Professional *
	Enterprise System Design	Associate * Professional *
	Enterprise Administration	Associate

* Certification is in development.



ArcGIS Desktop Certifications

- Associate level – Measures ability to use ArcGIS basic functions to visualize, manage, and analyze geospatial data
- Professional level – Measures ability to use a broader range of ArcGIS tools and functionality to define and successfully complete complex GIS projects.



Comparing the two Desktop Certs

Associate

A qualified candidate should be able to:

- Construct a map using available datasets
- Select the datasets necessary to publish a map or perform a specific analysis
- Create new map datasets from analysis of existing datasets
- Determine and define an appropriate coordinate system
- Perform basic data editing
- Select and perform spatial data analysis using standard tools
- Apply basic map visualization and cartography skills
- Use ArcGIS Explorer, ArcGIS Online, and desktop extensions

Professional

A qualified candidate should be able to:

- Utilize advanced modeling techniques including branching, iteration, scripting, etc.
- Apply fundamental spatial statistics
- Perform advanced vector and raster analysis including map algebra
- Perform surface modeling and analysis
- Understand and apply Python scripting
- Perform fundamentals of spatial database design
- Apply advanced visualization techniques
- Understand and apply fundamental network analysis concepts
- Build complex data sets
- Author and publish a map service and image service

ArcGIS Developer Certifications

- Desktop
 - Associate
 - Professional
- Web
 - Associate** (the only one that is ready today)
 - Professional
- Mobile
 - Associate
 - Professional



Web Developer Associate

- Measures skills of GIS web developers who are part of a web-development team, but don't yet have the experience required to define and lead major projects
- Skills included:
 - Identify ArcGIS geometry types, relationships, and operations
 - Define map and layer concepts and their applications in development
 - Understand relevant performance implications
 - Understand service configuration for out of the box services
 - Use services via REST and SOAP
 - Work with maps and layers, and other visualization elements
 - Use Web API tools
 - Work with secured services
 - Troubleshoot Web applications
 - Deploy Web applications



ArcGIS Enterprise Certifications

- Geodatabase Management
 - Associate
 - Professional
- GIS Systems
 - Associate
 - Professional
- GIS Administration
 - Associate



ArcGIS Enterprise Geodatabase Associate

- Exam measures the understanding of the components and architecture of the geodatabase and the skills used in supporting ArcGIS in a multi-user enterprise.



- A qualified candidate should be able to:
 - Understand basic ArcGIS concepts
 - Understand the system requirements for Relational Database Management System (RDBMS)
 - Design, install, and configure a geodatabase at a general level
 - Understand GIS workflows and their impact on the geodatabase
 - Manage data within the geodatabase at a general level
 - Perform geodatabase maintenance and troubleshooting
 - Use geoprocessing tools, command line, and performance monitoring and tuning tools

ArcGIS Enterprise Administration Associate

- Exam measures skills related to the deployment, implementation, maintenance and support of enterprise GIS systems.



A qualified candidate should be able to:

Deploy and maintain a given solution based on a provided solution/system design

- Make configuration changes to system architecture to meet production needs
- Perform continuous monitoring and maintenance
- Install and configure ESRI and supporting software according to ESRI best practices
- Troubleshoot common ESRI technology issues, including distinguishing between ESRI and supported systems issues such as RDBMS and Web servers
- Efficiently use ESRI's licensing model
- Determine appropriate GIS services to host in-house or delegate to ArcGIS Online
- Determine efficient settings of pooled and non-pooled services
- Diagnose and improve the performance of map services
- Identify performance bottlenecks and recommend improvements
- Setup map caching
- Monitor the health of different components of the system and take appropriate action, if required
- Utilize tools such as LDAP, Active Directory, IIS, J2EE Applications Servers, and Load Balancer/Balancing Software

Greenville Tech offers Certification Exams

- In our Distance Education Testing Center
- Cost \$225 per exam
- Call to schedule



The Testing Center is located on the Barton Campus in the Dental Building (Bldg 112) Room 350.

Hours (except during final exams)

Monday-Thursday 9:00 am to 8:00 pm

Friday 9:00 am to 1:00 pm

Contact Info:

(864) 250-8020 or email DistEdTestCtr@gvltec.edu

