

Esri Southeast Regional User Group Conference

May 2–4, 2011 | Jacksonville, FL



Planning for Your Professional GIS Development: Esri Technical Certification

Renee Schreibman

Regional Training Consultant



Session Overview

- **Benefits of Training**
- **Budgeting/Purchasing**
- **Training Delivery Methods**
- **Training Plans**
- **Esri Technical Certification**

Why is training important?

- Develop staff to maintain GIS service levels
- ArcGIS 10 is a powerful system
- Training is an investment, not an expense



What can training do for you?

- **Complete the Enterprise GIS Solution**
- **Develop staff to maintain the GIS System**
- **Increase the return on your investment**
- **Increase awareness and understanding of Esri technology**
- **Full Software Utilization**

Benefits of Esri Training

- Taught on the most up-to-date software version
- CompTIA CTT+ Certified Instructors
- Minimum of Desktop Associate Certification
- Variety of delivery methods
- Low instructor to student ratio



Budgeting/Purchasing training

- **Individual seats – traditional or virtual**
- **On Site Training**
- **Virtual Campus – Annual User License**
- **Esri Enterprise Advantage Program (EEAP)**
- **Esri Developer Network (EDN)**
- **Add-on a block of instructor-led classes**
 - **Small Government or Utility ELA**
 - **Enterprise License Agreement (ELA)**
 - **Training Pass**

How to sell training to management

- **Cost Benefit Analysis**
- **Workforce is your biggest asset**
 - **Protect that investment with ongoing training**
 - **Tie into existing HR Staff Development workflows**
- **Develop a training plan**
 - **Identify areas of knowledge**
 - **Identify gaps of knowledge**
 - **Identify common training needs**
 - **Cost savings - bulk purchasing**

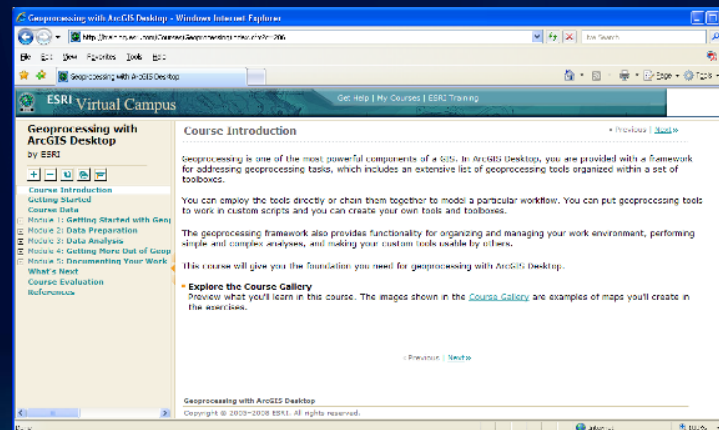
Show me the savings...

- **Save time and money on projects**
 - **When organizations spent 8% of project budget on training, they met objectives 85% of the time**
 - **Increase investment to 10% and the objective completion rate goes up to 100%**

Source: IDC, "Average IT Project Success: How Successful Do You Want to Be?" January 2009, IDC# 216169, Volume 1

Training Delivery methods

- Instructor-led
 - Classroom training
 - In-person or online (virtual)
- E-learning
 - Self-paced (virtual campus, web training courses)



Coaching

- Demos of functionality using a copy of your data
 - On the fly with student collaboration
- Q & A on class topics
- Application to workflows and environment
- Additional in depth topic discussion
- Must accompany a client site class



Training Plans

Training Plans

- **Complement your GIS plan**
- **Organized by workflow or job role**
- **Often tailored**
 - **Specific projects**
 - **By department**
 - **Entire organization**



Types of Training Plans

- **Personalized Plan**
- **Project-Based Planning**
- **Department/Organizational Development Planning**

Training Plan Development Process

Where do you start?

Identify

People

5

Roles

IS Manager
GIS Analyst (3)
GIS DBA/Manager

Responsibilities

Data Analysis
Versioning
SDE Edits

Workflows

GIS Data Management
GIS Editing
Enterprise GIS Mgmt

Wants

MultiUser Geodatabase
Web App Development
v10

Needs

Intro to ArcGIS Server
What's New in v10

Training Plan Document

Designated Training Consultant works with you to devise a training plan

GIS Application Programmers (1–2 people)

The GIS application programmer develops custom applications to meet specific user needs and is responsible for developing and enforcing application development procedures and standards.

Recommended Training

1. [Getting Started with GIS](#) (E)
2. [ArcGIS Desktop II: Tools and Functionality](#) (3 days)
3. [What's New in ArcGIS Desktop 10](#) (2 days) — Experience with GIS in place of 1 & 2 above
4. [Introduction to Geoprocessing Scripts Using Python](#) (2 days)
5. [Developing Applications with ArcGIS Server Using the Microsoft .NET Framework](#) (3 days)
6. [Introduction to ArcGIS Server](#) (2 days)

Optional Training

1. [ArcGIS Desktop III: GIS Workflows and Analysis](#) (2 days)
2. [Building Geodatabases](#) (3 days)
3. [System Architecture Design Strategies](#) (3 days)

Training Implementation Plan

City of SERUG Training Plan		Traditional/Virtual	Getting Started with GIS - Virtual campus - Web based training	ArcGIS Desktop II: Tools and Functionality	System Architecture Design Strategies	Introduction to ArcGIS Server	ArcGIS Server Web Administration Using .Net	Developing Applications with ArcGIS Server Using .NET	ArcGIS Server Enterprise Configuration and Tuning for SQL Server	Building Web Applications Using ArcGIS API for Flex or Silverlight	Introduction to Geoprocessing Scripts Using Python	Introduction to the Multiuser Geodatabase	Data Management in the Multiuser Geodatabase	Managing Editing Workflows in a Multiuser Geodatabase	Creating Effective Web Applications	What's New in ArcGIS Desktop 10	What's New in Editing at ArcGIS Desktop 10	# of Classes Per Person	
IS Manager		X	X	X	X	X	X	X	X						X			8	IS Manager
GIS Analyst 1						X							X	X	X	X	X	6	GIS Analyst 1
GIS Analyst 2						X								X		X	X	4	GIS Analyst 2
GIS Analyst 3						X								X		X	X	4	GIS Analyst 3
GIS DBA & Manager						X	X		X	X			X	X	X	X	X	9	GIS DBA & Manager
# Staff		1	1	1	5	2	1	2	1	0	0	2	4	3	4	4	4	31	Total # of Classes
# Days for each class			3	3	2	3	3	2	2	3	2	3	3	3	3	2	1		
Total # of days		FREE	3	3	10	6	3	4	2	0	0	6	12	9	8	4	70		Total Estimate of Training Days

Implementation Plan

- **Departments Collaborate to offer onsite training**
- **Clearly identify training opportunities and needs**
- **Ability to track attendance**
- **Customized Implementation template**
- **Used for Planning & Budgeting**
- **Identify opportunities for training savings**

What's new in training 2011?

New training website

The screenshot shows the Esri Training website interface. The main header is 'Training' with a background map. On the left, there are navigation buttons: 'Find Training' (circled in red) and 'My Training'. Below these are sections for 'Getting Started' and 'Learning Resources'. The main content area features the 'Esri Training Catalog' with a list of links: 'Search online', 'Request a printed catalog', and 'Download [PDF - 2.1 MB]'. Below the catalog is the 'Training News' section with three articles: 'Esri Charts a New Direction in Training', 'Moving to ArcGIS 10?', and 'What's New in Editing at ArcGIS Desktop 10'. On the right, there is a 'My Training | Help | Login' link and a 'Esri Technical Certification announced' section (circled in red) with a 'Learn More' button and a globe icon.

Training

My Training | Help | Login

Find Training ▶

My Training ▶

Getting Started

- Students and Faculty
- GIS Professionals
- Training Managers

Learning Resources

- Books by Esri Press
- GIS Bibliography
- Newsletter
- Esri Training Matters Blog
- Annual User License

Esri Training Catalog

Find courses to improve your GIS skills and help your organization get the most out of its GIS investment.

- Search online
- Request a printed catalog
- Download [PDF - 2.1 MB]

Training News

Esri Charts a New Direction in Training

Students will notice a greater emphasis on interactive learning and less focus on lecturing.

Moving to ArcGIS 10?

We have dozens of training options to fit your budget, learning style, and GIS responsibilities.

What's New in Editing at ArcGIS Desktop 10

In one day, get the hands-on practice you need to complete your GIS editing tasks faster and easier—all from the convenience of your own desktop.

Esri Technical Certification announced

Find out about certifications and testing. Exam registration opens January 17, 2011.

[Learn More](#)

Esri Technical Certification Program

New Search Feature

The screenshot displays the Esri Training Catalog website. At the top, there is a header with a map background and the text "Training Catalog". On the right side of the header, there are links for "My Training | Help | Login".

On the left side, there is a sidebar with the following sections:

- Search Catalog**
- Getting Started
- Types of Training
 - Instructor-Led Training
 - Self-Paced Training
- Questions?**
 - Send an e-mail or call 800-447-9778, ext. 5757.

The main content area is titled "Search Esri Training Catalog" and includes the text: "Search or browse the wide variety of training options offered by Esri. If you can't find what you are looking for, please [contact us](#) for assistance."

Below this text are four navigation tabs: "Search", "Browse by Software", "Search Class Schedule", and "Course Recommendations". The "Search" tab is highlighted with a red oval.

Under the "Search" tab, there is a search input field and a green "Search" button. Below the input field is a link for "View Entire Catalog".

Below the search area is a section titled "Popular Searches" with a list of links:

- Free Training
- Instructor-led Courses
- Web Courses
- Training Seminars
- Cursos en Español

On the right side of the main content area, there is a box titled "Course Catalog in Print" which includes a small image of the catalog and links to "Download the catalog [PDF]" and "Request a printed catalog".

Classes at ArcGIS 10

Almost all instructor led classes are available at 10

– **Client-site classes can still be scheduled at 9.3**

New instructor led classes:

- Programming ArcGIS Desktop using Add-Ins
- What's New in ArcGIS Desktop (Virtual)
- What's New in Desktop Editing (Virtual)
- Managing Imagery Using ArcGIS
- Building Web Apps Flex API
- Building Web Apps Silverlight API
- Building Web Apps JavaScript API
- Working with 3D GIS

Virtual Campus (v10) classes will roll out through 2011



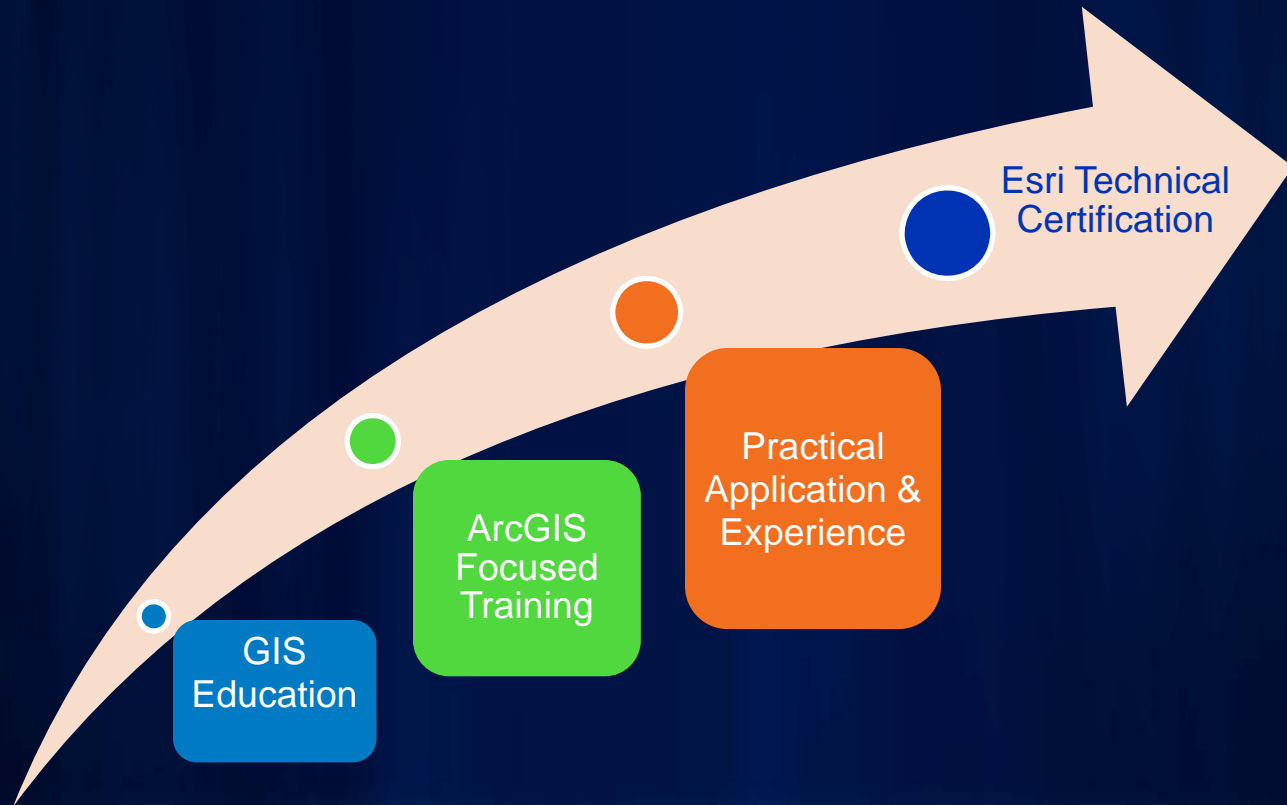
Esri Technical Certification

Why Esri Technical Certification?

The purpose of the Esri Technical Certification Program is to create a standardized level of expertise for the use of Esri products and technology.

This is achieved by allowing individuals to validate their knowledge, skills and abilities against a proven and measurable level of competency.

Foundation for Technical Certification



Benefits for Individuals

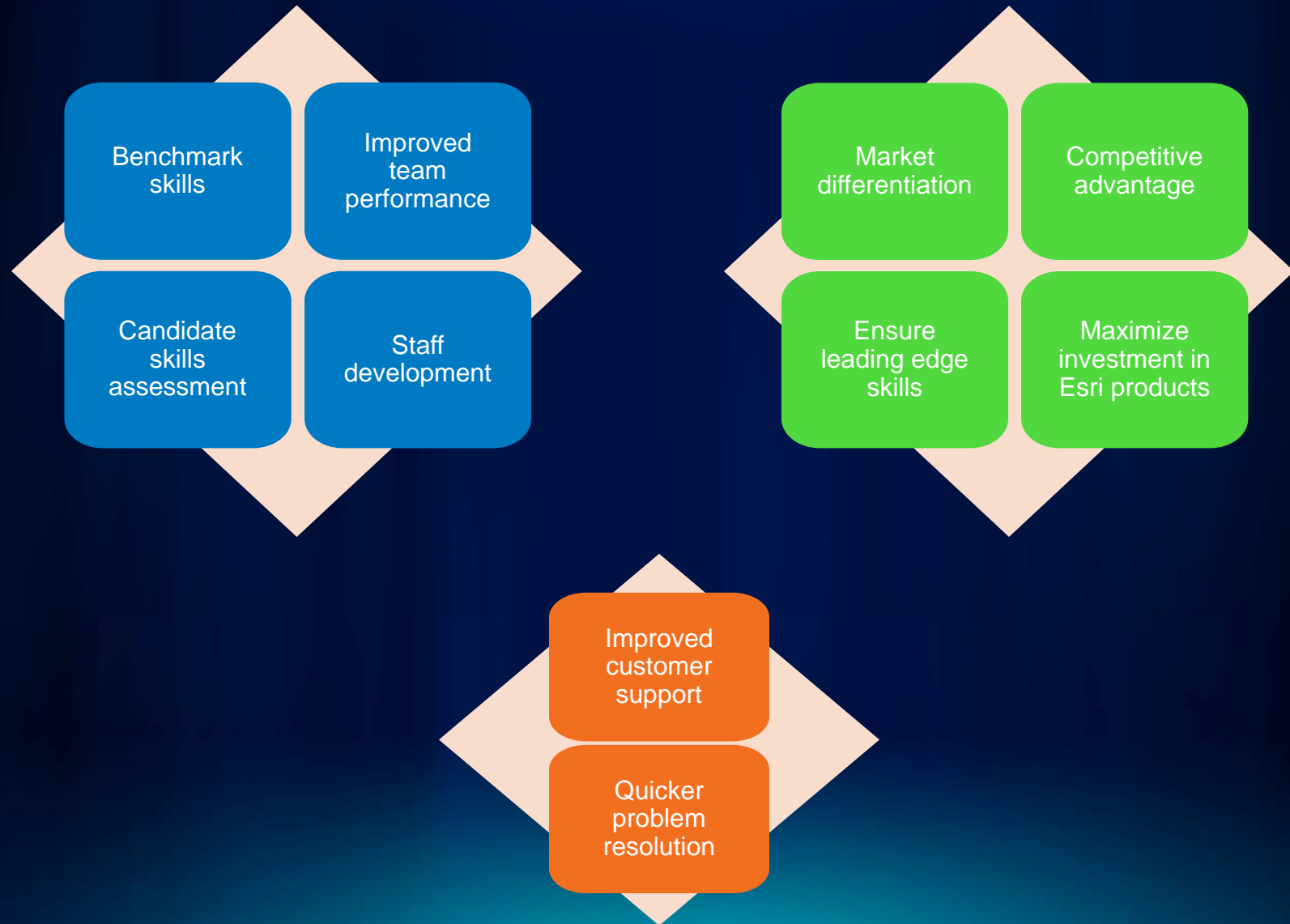
Benchmark
skills

Professional
differentiation

Higher earning
potential

Personal
development

Benefits for Organizations



Quick Facts

IDC Study*:

- **65% of managers believe that certification is important to team performance**
- **66% of managers believe that certification improves the level of service and support offered to IT end users/customers**

*"Impact of Training: Functional Excellence Leads to Operational Productivity," IDC, Doc#

215762, Dec. 2008

Quick Facts

IDC Study*:

- Team performance increases every time a new team member is certified.
- With a sufficient percentage of team members certified, IT operational performance can increase up to an average of 11%

*"Impact of Training: Functional Excellence Leads to Operational Productivity," IDC, Doc#

215762, Dec. 2008

Quick Facts Cont'd

- **Unscheduled downtime is about 20% lower at organizations with more certified IT staff. ***
- **Overall, professionals who had earned an IT or project management certification during the last five years earned an average of \$5,242 more than their counterparts. ****

* IDC, Impact of Training on Network Administration: Certification Leads to Operational Productivity Survey, Doc # 220563, November 2009.

** Global Knowledge Training LLC, 2010 IT Skills and Salary report, 2010.

Esri Technical Certification

- Exam Registration Opened January 17, 2011
- Two Levels: Associate & Professional
- Three Esri Technical Certification Tracks
 1. ArcGIS Desktop
 2. Developer
 3. Enterprise



Overview of Certification Tracks

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

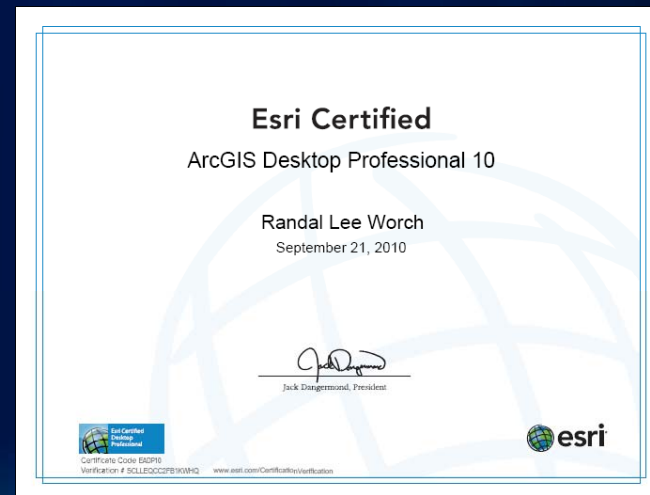
Associate

Release Timeline

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

Esri Technical Certification

- Built for Esri version 10
- Exam-based measure of skill
- 95 multiple choice questions
- 2 to 2 ½ hours in length
- \$225 per exam
- Pearson Vue Testing Center



Preparing for Esri Technical Certification

- Review the Candidate Qualifications and Skills Measured
- Align your skills with the listed skills and qualifications
- Review the training resources and identify classes to prepare.
- Visit the [ArcGIS Resource Center](#)
- Esri product web pages for: demos, PowerPoint slides, blogs, and online content.

Skills Review

. [Esri Technical Certification: Skills Review for ArcGIS Desktop Associate](#)

[Esri Technical Certification: Skills Review for ArcGIS Desktop Professional](#)

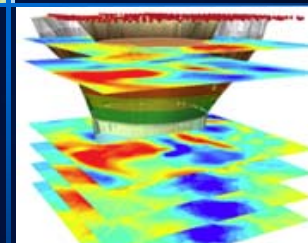
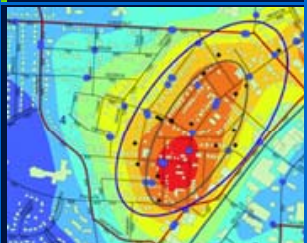
- **Get plenty of rest the day before the exam and relax!**

Resources

- **Esri Technical Certification website**
 - www.esri.com/certification
- **Pearson VUE website**
 - www.pearsonvue.com/esri
- **Questions**
 - certification@esri.com
- **Downloadable brochure**
 - <http://www.esri.com/library/fliers/pdfs/esri-technical-certification.pdf>
- **Voucher store**
 - <http://www.pearsonvue.com/vouchers/pricelist/esri.asp>



Questions?



Contact Information

- We are always available to answer your training questions.

www.esri.com/training

gistraining@esri.com

800-447-9778 x1-5757

- Southeast Regional Training Consultant

Renee Schreibman

704-541-9810 x8639

rschreibman@esri.com



esri