



Elise can see more creative ideas coming from her team; their organisation's professional development program supports informed thinking

Working with Cartographic Representations

ESRI Australia's Training Solutions - supporting your location intelligence needs through flexible and valuable training options.

Why is it important?

ArcGIS software provides the ability to create Cartographic Representations, which are used to create sophisticated feature symbology that is stored in the geodatabase with the associated spatial data. This course explains what cartographic representations are and how they can be used to solve cartographic problems that were formerly difficult or impossible to solve in the ArcGIS environment. Students learn how to create symbology for different map purposes and scales without duplication and reprocessing of spatial data. The course teaches cartographic representations in the context of a map project. In the exercises, students convert existing symbology to representations and gain experience with advanced symbol creation and manipulation as they improve a map designed to promote bicycling. Along the way, students learn how balancing the use of cartographic representations with traditional symbology methods can optimise a map production workflow.

Designed for

This course is designed for intermediate to expert ArcGIS users who make maps or are responsible for managing cartographic data standards for their organisations.

Course Level: Intermediate

Learning Outcomes

- // Describe the structure of cartographic representations
- // Create cartographic representations using different methods
- // Create custom symbols using cartographic representations
- // Use cartographic representations to solve cartographic problems associated with symbol conflict, generalisation, and scale
- // Create multiple cartographic representations for a single geodatabase feature class
- // Understand when to use cartographic representations and when to use traditional methods to symbolise map features

Prerequisites

Students should have completed Desktop II: Tools and Functionality, Desktop III: GIS Workflows and Analysis, and Cartography with ArcGIS or have equivalent knowledge.

Recommended Reading

Cartographica Extraordinaire: The Historical Map Transformed
David Rumsey and Edith M. Punt

Designing Better Maps: A Guide for GIS Users *Cynthia A. Brewer*

Cartographic Relief Presentation: *Eduard Imhof*

Designed Maps: A Sourcebook for GIS Users *Cynthia A. Brewer*

Certain recommended books can be purchased online, by visiting the ESRI Australia online store at www.esriaustralia.com.au/onlinestore

Course Details

Duration	2 days
Commencement Dates	For the latest course calendar please visit www.esriaustralia.com.au/training
Terms & Conditions	For the latest ESRI Australia training terms & conditions please visit www.esriaustralia.com.au/training

Course Content

- Overview of cartographic representations**
 - // Review of the traditional symbology model
 - // The cartographic representation model
 - // Storing symbology
 - // Representations vs. traditional symbology
- Cartographic project planning**
 - // Introduction to the course project map
 - // Project layout and symbology requirements
- Basics of cartographic representations**
 - // Understanding the representation structure
 - // Creating, managing, and modifying representation rules
 - // Converting existing symbology
 - // Creating multiple representations
- Understanding symbol layers**
 - // Creating and modifying marker, stroke, and fill layers
 - // Working with the Marker Editor
 - // Importing symbology
- Understanding marker placement styles and geometric effects**
 - // Uses and properties of marker placement styles
 - // Overview of geometric effects
 - // Understanding and solving geometry logic errors
- Managing overrides**
 - // Types of overrides
 - // Creating and removing overrides
 - // Symbol properties as attributes (field mapping)
- Refining representations**
 - // Using geoprocessing tools for automated cartography
 - // Understanding free representations
- Managing cartographic representations**
 - // Planning and workflow considerations
 - // Using labels and annotation with representations
 - // Geodatabase schema changes and implications for versioned geodatabases
- Perfecting the map**
 - // Fine-tuning the project map
 - // Map layout and printing

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About ESRI Australia

ESRI Australia is the source of astute professional services and Geographic Information Systems (GIS) technology. We're experts in location intelligence; with over 30 years experience in implementing GIS solutions in dozens of industries.

Our passion for technology and considered approach gives our clients the power to see more and do more. With our expertise, knowledge, vision and technical capability, we turn 'possibility' into 'reality'

ESRI Australia Training Solutions

Derive maximum benefit from your location intelligence solution by ensuring your workforce has the knowledge and skills to fully utilise our investment in GIS.

ESRI Australia offers a complete range of training services to help educate and support your solution end users and administrators. With courses for beginners,

Intermediate and advanced users, ESRI Australia caters for all skill sets and educational requirements.

Our courses are taught by ESRI authorised instructors, which means that your employees can be assured of receiving consistent quality GIS training by accredited trainers.

Our flexible training options range from developing and delivering a complete training program for your organisation through to a range of scheduled courses held at centrally located training facilities.

With a client site, scheduled or knowledge transfer training available, ESRI Australia can provide the solution to meet your organisations training needs.