



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

Creating and Publishing Maps with ArcGIS®

ESRI Australia's Training Solutions

supporting your location intelligence needs through flexible and valuable training options

Why is it important

ArcGIS Server provides many tools for solving complex spatial problems. This course, created for the experienced ArcGIS user, examines modelling techniques used in spatial analysis and introduces processes and tools that can be used to perform a variety of GIS analysis tasks. The ArcGIS geoprocessing framework, specifically ArcToolbox, ModelBuilder, and the command line are emphasised.

Project-based exercises draw from a range of interesting real-world GIS applications. The course concludes with an exciting final project in which participants are challenged to implement many of the tools taught throughout the course. This course is taught using an ArcInfo licence of ArcGIS.

Designed for

This course is designed for experienced ArcGIS users with little or no cartographic experience as well as experienced cartographers with limited ArcGIS experience who want to create database-driven maps.

Course Level: Intermediate

Learning Outcomes

- // Plan a cartographic project
- // Evaluate data for cartographic purposes
- // Apply fundamental cartographic design principles to create a well designed map
- // Create labels and annotation that are easy to read by a map's intended audience
- // Apply a standard cartographic workflow to efficiently create maps using ArcGIS
- // Produce maps for a variety of delivery models, including a Web mapping application

Prerequisites

Completion of *ArcGIS Desktop II: Tools and Functionality* or equivalent knowledge is required.

Recommended Reading

Visit the new Mapping Center, a website created by Cartographers, it provides online information and guides to cartographic literature. <http://mappingcenter.esri.com>

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

Designing Better Maps: A Guide 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

Software used in this course	ArcGIS Desktop- ArcInfo 9.3.1 ArcGIS Server- Advanced Edition/Standard Edition 9.3.1 ArcGIS Desktop Extensions- Maplex for ArcGIS/ArcGIS Spatial Analyst 9.3.1
Duration	3 days
Commencement Dates	For the latest course calendar please visit www.esriaustralia.com.au/training
Terms & Conditions	Please see our website for the latest terms and conditions

Course Content

The cartographic planning process

- // Advantages of GIS cartography
- // Steps in the cartographic workflow
- // Ensuring cartographic quality

Selecting and evaluating data

- // Selecting the right map data
- // Designing a cartographic database
- // QC tasks to evaluate data quality

Choosing a coordinate system

- // Datums and map projections
- // Geographic transformations
- // Selecting an appropriate coordinate system

Elements of map design

- // Visual weight, Visual hierarchy
- // Colour in cartography

Qualitative and quantitative symbols

- // Designing colour schemes
- // Symbols for different mediums
- // Designing for the colour-impaired

Advanced Symbology techniques

- // Cartographic representations
- // PLTS visual specifications tool
- // Variable depth masking
- // Symbol-level drawing

Generalisation

- // Creating generalisation models

Symbolising elevation

- // Three dimensional views
- // Combining vector and raster displays
- // Image flattening

Working with map labels

- // Text placement guidelines
- // Overview of Maplex
- // Placement styles, label stacking, Abbreviations

Creating and editing annotation

- // Advanced effects using masking
- // Designing type for web maps

Map layout

- // Balance and symmetry
- // Adding coordinate grids

Map element design

- // Design considerations
- // Using inset maps
- // Quality control for map elements

Map output

- // Using map templates
- // Using GIS services for visualisation
- // Implementing quality control for map elements

Final Project (self-directed)

- // Applying cartographic workflow and design principles

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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.