



# ESRI Australia

Putting knowledge into place

## Training

# Course Description

## Writing Advanced Geoprocessing Scripts using Python

### Description

Building on the skills and knowledge taught in *Introduction to Geoprocessing Scripts Using Python*, this course teaches intermediate to advanced Python scripting techniques for the ArcGIS geoprocessing framework. Students begin by refining their Python scripting skills as they manipulate several key data types and create effective, reusable code. Students then apply these skills to execute custom geoprocessing functionality. The course covers how to incorporate Python scripts into the ModelBuilder environment and prepares students to leverage the full capabilities of Python scripting within the ArcGIS geoprocessing framework.

### Topics

- Manipulate Python's key data types, including strings, lists, and dictionaries.
- Write Python scripts to read and write text files.
- Create reusable code.
- Create scripts that read existing geometries and create new geometries.
- Work with subsets of data.
- Implement data management techniques on personal, file, and multiuser geodatabases.
- Incorporate Python scripts into the ModelBuilder environment.

### Audience

This course is designed for experienced ArcGIS users who want to create Python scripts to automate complex geoprocessing tasks.

### Prerequisites and recommendations

Students should have completed **Introduction to ArcGIS I**, **Introduction to ArcGIS II** and **Introduction to Geoprocessing Scripts Using Python** or have equivalent knowledge. Students should have experience applying the concepts and syntax taught in the introductory course.

**Note: experience writing Python scripts that contain variables, loops and standard ArcGIS geoprocessing tools is required.**

**Duration:** Three Days

**Freecall:** 1800 447 111

**Email:** [connect@esriaustralia.com.au](mailto:connect@esriaustralia.com.au)

**Fax:** 07 3211 1310