

# Introduction to Python Programming for ArcGIS ver 10.2.2



ERIA Consultants, LLC

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## Outline

This workshop will explain the fundamental elements of the Python programming language. Specifically, it will cover how Python relates (arcpy) to ArcGIS Desktop (ver 10.2.2) and various geoprocessing tools in addition to: creating variables, modifying tables, modifying feature data sets, the use of cursors, and incorporating a python script into a custom tool. Participants will be led through these topics via hands-on python programming exercises.

## Target Audience

This course is designed for beginning programmers who want to understand and learn how to integrate Python scripts into ArcGIS. After completing this course, students will have the knowledge of how to construct and understand basic Python scripts for uses in ArcGIS ver 10.2.2 via the "arcpy" module.

## Benefits

If desired, participants will be able to get GIS Professional (GISP) educational credits. These educational credits can be apply for the GISP certificate or for recertification credits from the GIS Certification Institute (GISCI) (<http://www.gisci.org/>). This course also can be used for continuing education credits (CE) for the American Society for Photogrammetry and Remote Sensing (ASPRS) Certified Mapping Scientist (CMS) certification (<http://www.asprs.org>). Also this course can be used for Certified Forester Education (CFE's) from the Society of American Foresters (<http://www.safnet.org>).

## Needed Equipment

This workshop can be given in person (on-site) or online (Webinar). If given online attendees will need an internet connection, a computer with ArcGIS (ver 10.2 or better) installed. I will supply the data, manuals, and personal instruction.

## Instructional Theme

Most examples and exercises in this workshop are environmental based. That is, exercises primarily use publicly available data from government agencies such as: USGS, EPA, USFS, and BLM.

## Workshop Cost

The cost for these workshops are negotiable. Contact Mike (email address above) for a quote. Please let him know the following information: 1) which workshop your organization is interested in taking, 2) the number of people attending the workshop, and 3) if the workshop will be online or on-site.

## Instructor's Bio

Michael Tuffly is the Principal for Environmental Resource Inventory and Analysis LLC (ERIA Consultants, LLC) in Boulder, Colorado. He is also a Certified Mapping Scientist, Remote Sensing from the American Society for Photogrammetry and Remote Sensing (ASPRS), Certified Forester from the Society of American Foresters (SAF), Certified Senior Ecologist from Ecological Society of America (ESA), and a GIS Professional (GISP) from the Geographic Information System Certification Institute (GISCI).

Mike holds a B.S. in Forestry, an M.S. in Natural Resource Management from Humboldt State University and a Ph.D. in Forest Science from Colorado State University in Fort Collins, Colorado.

Dr. Tuffly has over 25 years of experience in applied GIS and spatial modeling for federal, state, private, and nonprofit organizations. In addition, he has over 30 years addressing various fire, natural resource and forest management issues in the United States and abroad. He has been an adjunct Professor in the Warner College of Natural Resources at Colorado State University in Fort Collins, Colorado. Mike has a term, on the SAF Forester Certification Review Board (CRB), from 2013 to 2016. He serves on the Professional Review Committee (PRC) of the CRB. He also serves as the 2014 President of the Rocky Mountain Region of ASPRS. He is also on the GISCI certification review committee since 2012.

