

# Introducing GIT

Learn via: **Classroom/AFA**

Duration: **1 Day**

## **Overview**

GIT allows distributed, serverless, version control management of software and document management. This workshop based course provides hands on exposure to GIT on the command line, through GUIs and onto servers such as GitHub. You will learn how GIT works, explore strategies to work with it effectively.

## **Prerequisites**

- Delegates should be comfortable with the concepts of software development, file systems and the command line. No specific programming skills are required.
- Students will need an email address they are willing to use as part of this course to build and work with GIT and GitHub

Please note: Before attending this class delegates must have a Microsoft account (signing up one is free). The instructions on how to set up a Microsoft account can be found [here](#).

## **Outline**

### **Git Basics**

- Installing GIT
- Working with the BASH
- Using the GUI
- Understanding the Architecture of a GIT application

### **Git Repos**

- Creating repositories
- Staged and unstaged resources
- Working with the GIT commit lifecycle
- Understanding when to commit

### **Git Updates and Tracking**

- Extending the git lifecycle to manage change
- Understanding and working with hunks
- Using GIT diff and dry run to commit with confidence
- Working with GITK

### **Branching**

- Working with the Master branch and the HEAD
- Working with the commit history
- Checking out branches
- Building and maintaining new branches
- Merging branches
- Exploring branch management strategy
- Stashing incomplete commits

### **Cloning and Remotes**

- Cloning repositories
- Working with remotes
- Using GitHub
- Pulling and pushing repositories
- Managing out of sink branches
- GIT in task run solutions