

# Essential Git commands for Hardware Engineers

Use these commands to streamline your hardware development workflow. Learn how to commit changes, manage branches and collaborate with your team more effectively.

**Git add**  
**[file / dir]**

Stage file to local commit

**Git**  
**branch**

List your branches

**Git branch**  
**[new\_branch]**

Create a new branch at the current commit

**Git checkout**  
**[branch]**

Switch to another branch

**Git clone**  
**[url]**

Copy entire remote repo into current directory

**Git commit-m**  
**"message"**

Commit your changes to local filesystem

**Git**  
**diff**

Show list of files that have changed but are not staged

**Git diff**  
**- - staged**

Show list of files that have been staged but not committed

**Git**  
**fetch**

Get all branches

**Git**  
**log**

Show all commits in the current branch's history

**Git log**  
**- - follow**

Display the commits of the file, even across renames

**Git**  
**pull**

Get and merge any commits from the tracking remote branch

**Git**  
**push**

Push your committed changes to the remote repo

**Git push**  
**[alias] [branch]**

Push your local branch commits to the remote branch repo

**Git rm**  
**[file]**

Delete the local file and stage the removal for commit

**Git show**  
**[sha]**

Display any Git object in human - readable format

**Git**  
**status**

Show local modified files staged for next commit