



# Introduction

3.0.1

## Why Should I Take this Module?



As a NetAcad student, you probably already know that the world of networking is always changing and there is always something new to learn. Right now, IT specialists are being urged to learn to develop software that lets them automate many of the tasks of network creation, maintenance, and administration.

There are many software development methodologies to choose from, and you should learn from software engineering best practices. In your career, you will develop software collaboratively as well as independently. This means that source control will be a big part of your work as a developer. This module provides context for where software development is today, and shows you modern software development methods to create that all-important business or user outcome.

3.0.2

## What Will I Learn to Do in this Module?



**Module Title:** Software Development and Design

**Module Objective:** Use software development and design best practices.

Topic Title	Topic Objective
Software Development	Compare software development methodologies.
Software Design Patterns	Describe the benefits of various software design patterns.
Version Control Systems	Implement software version control using GIT.
Coding Basics	Explain coding best practices.
Code Review and Testing	Use Python Unit Test to evaluate code.

Topic Title	Topic Objective
Understanding Data Formats	Use Python to parse different messaging and data formats.

2.3  
DevNet Developer Environment Summary

3.1  
Software Development