

## Learning Guide Unit 4

### Overview

#### UNIT 4: Computer Arithmetic

### Topics

- Number systems
- Binary Representation & arithmetic operations
- Adders and subtractors
- Multipliers and dividers
- ALU (Arithmetic Logic Unit)
- ALU Design

### Learning Objectives

By the end of this Unit, you will be able to:

- Identify different number systems and perform arithmetic operations.
- Demonstrate an understanding of principles of adders, subtractors, multipliers and dividers.
- Explain the implementation and design of adders, subtractors, multipliers, and dividers to perform mathematical operations.

### Tasks

- Read the Learning Guide and the Reading Assignment
- Complete the Discussion Assignment by posting in the Discussion Forum
- Respond to two of your fellow classmates' posts in the Discussion Forum
- Complete and submit the Assignment Activity
- Take and submit the Self-Quiz

