

**Fundamental Teaching Unit:**

**Course:** Algorithms and Data Structures 2

**Credits:** 4

**Coefficient:** 3

**Course Objectives:** To enable students to acquire the fundamental concepts of programming.

**Recommended Prerequisite Knowledge:** Basic concepts of algorithms and data structures.

**Course Content:****Chapter 1: User-Defined Types**

1. Introduction
2. Enumerations
3. Records (Structures)
4. Other Type Definition Possibilities

**Chapter 2: Files**

1. Introduction
2. Definition
3. File Types
4. File Manipulation

**Chapter 3: Linked Lists**

1. Introduction
2. Pointers
3. Linked Lists
4. Operations on Linked Lists
5. Doubly Linked Lists