**Pseudocode**

**Opening the File and Reading Data:**FUNCTION loadCourses(filePath):

OPEN file at filePath FOR reading

IF file does not open successfully THEN

PRINT "Error: File cannot be opened."

RETURN

WHILE there are more lines in the file DO

READ a line from the file

CALL parseCourseLine(line)

CLOSE the file  
  
**Parsing Each Line and Validating the Format:**FUNCTION parseCourseLine(line):

SPLIT line into tokens based on delimiter (e.g., comma)

IF number of tokens is less than 2 THEN

PRINT "Error: Line format is incorrect, missing parameters."

RETURN

courseNumber = tokens[0]

courseTitle = tokens[1]

prerequisites = tokens[2:]

IF courseNumber IS EMPTY OR courseTitle IS EMPTY THEN

PRINT "Error: Course number or title is missing."

RETURN

VALIDATE prerequisites

**Validating Prerequisites:**FUNCTION validatePrerequisites(prerequisites, courseList):

FOR each prerequisite in prerequisites DO

IF prerequisite IS NOT found in courseList THEN

PRINT "Error: Prerequisite course " + prerequisite + " does not exist."

RETURN

**Creating Course Objects and Storing in Binary Search Tree:**FUNCTION createCourseObject(courseNumber, courseTitle, prerequisites):

course = NEW CourseObject

course.number = courseNumber

course.title = courseTitle

course.prerequisites = prerequisites

RETURN course

FUNCTION insertCourseIntoBST(bst, course):

IF bst.root IS NULL THEN

bst.root = course

ELSE

CALL insertNode(bst.root, course)

FUNCTION insertNode(node, course):

IF course.number < node.course.number THEN

IF node.left IS NULL THEN

node.left = course

ELSE

CALL insertNode(node.left, course)

ELSE

IF node.right IS NULL THEN

node.right = course

ELSE

CALL insertNode(node.right, course)  
  
**Printing Course Information and Prerequisites**FUNCTION printCourseInfo(bst):

CALL inOrderTraversal(bst.root)

FUNCTION inOrderTraversal(node):

IF node IS NOT NULL THEN

CALL inOrderTraversal(node.left)

PRINT courseInfo(node.course)

CALL inOrderTraversal(node.right)

FUNCTION courseInfo(course):

PRINT "Course Number: " + course.number

PRINT "Course Title: " + course.title

PRINT "Prerequisites: " + course.prerequisites