Step one:

Procedure ReadFile(filePath):

Open file at filePath

If file is not found:

Print "Error: File not found."

Exit program

End If

For each line in file:

If LineIsValid(line):

ParseLine(line)

Else:

Print "Error: Invalid line format."

End If

End For

Close file

End Procedure

Function LineIsValid(line):

tokens = Split(line, ',')

If Length(tokens) >= 2:

Return True

Else:

Return False

End If

End Function

Procedure ParseLine(line):

tokens = Split(line, ',')

courseNumber = tokens[0]

courseTitle = tokens[1]

prerequisites = tokens[2:]

For each prereq in prerequisites:

If not CourseExists(prereq):

Print "Error: Prerequisite not found for course ", courseNumber

Exit program

End If

End For

courseObject = CreateCourseObject(courseNumber, courseTitle, prerequisites)

VectorAppend(courseVector, courseObject)

End Procedure

Function CourseExists(courseNumber):

For each course in courseVector:

If course.courseNumber = courseNumber:

Return True

End If

End For

Return False

End Function

Step two:

Procedure CreateCourseObject(courseNumber, courseTitle, prerequisites)

// Create a new course object

newCourse = new CourseObject()

// Set instance variables with provided data

newCourse.courseNumber = courseNumber

newCourse.courseTitle = courseTitle

newCourse.prerequisites = prerequisites

Return newCourse

End Procedure

Procedure VectorAppend(vector, element)

// Add an element to the end of the vector

vector[length(vector)] = element

End Procedure

Step three:

Procedure PrintCourseInformation(courseNumber):

For each course in courseVector:

If course.courseNumber equals courseNumber:

Print "Course Number: " + course.courseNumber

Print "Course Title: " + course.courseTitle

Print "Prerequisites: " + course.prerequisites

Return

End If

End For

Print "Error: Course not found."

End Procedure