

Bossier Parish Community College  
Master Syllabus

**Course Prefix and Number:** CTEC 295

**Credit Hours:** 3-3-0

**Course Title:** The Software Development Process

**Course Prerequisites:** CTEC 235; CTEC 243; CTEC 250 or CTEC 260

**Textbook(s):** None

**Course Description:** This course provides a comprehensive overview of the core elements of the software development process, including common software development methodologies, source control, refactoring, and testing. This course also includes programming projects where the students work in teams.

**Learning Outcomes:**

At the end of this course, the student will:

- A. describe software development methodologies;
- B. develop software in a team environment using software source control;
- C. use software refactoring techniques; and
- D. use software testing techniques.

To achieve the learning outcomes, the student will or will be able to:

(The letter designations at the end of each statement refer to the learning outcome(s).)

1. describe the waterfall, spiral, iterative, and agile development methodologies (A);
2. describe software source control approaches (B);
3. use software source control in a team programming environment (B);
4. use software refactoring techniques to debug programs (C);
5. use software refactoring techniques to redesign software (C);
6. describe standard software testing methods, levels, and types (D); and
7. use software testing techniques to document software issues (D).

**Course Requirements:**

1. A student must successfully complete the course with an average of 70% or above on the combined learning outcomes.
2. Each student is expected to attend classes regularly; excessive unexcused absences constitute grounds for suspension (refer to the student handbook for attendance policies).

**Course Grading Scale:**

- A = 90 - 100
- B = 80 - 89
- C = 70 - 79
- D = 60 - 69
- F = 0 - 59

**Attendance Policy:** The college attendance policy is available at <http://www.bpcc.edu/catalog/current/academicpolicies.html>

**Course Fees:** This course is accompanied with an additional non-refundable fee for supplemental materials, laboratory supplies, software licenses, certification exams, and/or clinical fees.

**Nondiscrimination Statement:** Bossier Parish Community College does not discriminate on the basis of race, color, national origin, gender, age, religion, qualified disability, marital status, veteran's status, or sexual orientation in admission to its programs, services, or activities, in access to them, in treatment of individuals, or in any aspect of its operations. Bossier Parish Community College does not discriminate in its hiring or employment practices.

**COORDINATOR FOR SECTION 504 AND ADA**

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**Equity/Compliance Coordinator**

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