

## About the Program

The Technical Certificate (T.C.) in Computer Programming Specialist is designed for developers who wish to specialize in software development technologies and languages.

Students will choose, via elective courses, to focus one of the following tracks: C Languages, Java, or Visual Basic.NET.

## Program Requirements

This program requires a **minimum of 28 credit hours**. Total program hours may vary based on the student's individual academic plan. This program is **not eligible** for financial aid.

Students in this program are not required to complete math courses unless they are listed as part of the certificate program. If you plan to pursue the degree program in this same field, please note **this certificate articulates directly into Computer Information Technology (2153) (A.S.) degree**, which includes a **Mathematical Thinking in Context math pathway**. To learn more about the Computer Information Technology (A.S.) degree, visit [fscj.edu/academics/programs/as/2153](https://fscj.edu/academics/programs/as/2153).

## Placement Testing

**Please meet with an advisor to determine if college placement testing is required.** Students who place into **developmental education courses** are required to complete designated developmental education courses with a grade of C or higher regardless of program of study and are also required to take one of two student success strategies courses. For additional information, visit [catalog.fscj.edu/academics/developmental-education-programs](https://catalog.fscj.edu/academics/developmental-education-programs) or speak with an advisor.

## Technical Certificate Graduation Requirements

- ☐ Fulfill all academic requirements for the chosen program of study as outlined in the Florida State College at Jacksonville catalog and curriculum.
- ☐ Earn minimum prescribed semester hours for the chosen program of study with a cumulative grade point average of 2.0 (C) on a 4.0 scale on all courses that apply to the chosen program of study.
- ☐ Complete a minimum of 25 percent of the total hours required for the program in residence at Florida State College at Jacksonville. Credit by examination and credit for prior learning do not count toward this residency requirement.
- ☐ Fulfill all obligations, financial or otherwise, to the College before graduating.

## Catalog Year

This document is prepared for students with a **2025-26 College Catalog year** who have not tested into developmental education courses. **Students who enter under the 2025-26 catalog** will be assigned to the degree or certificate requirements in effect during the 2025-26 academic year. The student's assigned catalog year will remain in effect as long as the student maintains continuous enrollment. Changes to requirements as mandated by law or by rule of the District Board of Trustees may supersede this provision.

**To maintain continuous enrollment**, a student must have registration for, and successful completion of, at least one course within a three-term period. After three consecutive terms of no enrollment, the student will be discontinued from the current program of study and will need to apply to FSCJ to reenter under the same program of study. Upon readmission, the student will be assigned to the current catalog of record in the chosen program.

## Curriculum

**Terms Offered** are subject to change. Please verify course availability at [fscj.edu/schedules](https://fscj.edu/schedules). **Select one** of the following tracks.

These sample roadmaps show possible pathways to program completion and may not be appropriate for all students.

### Sample Roadmap for C Languages Track

#### Term 1

Before enrolling in your first term classes, **please meet with an advisor** for specific guidance about your academic plan.

- |  |                     |
|--|---------------------|
| <input type="checkbox"/> COP 1000C - Introduction to Computer Programming, Credit Hours: 3. <b>Terms Offered:</b> Fall, Spring, Summer.                  | Grade Earned: _____ |
| <input type="checkbox"/> CGS 1100C - Microcomputer Applications for Business and Economics, Credit Hours: 3. <b>Terms Offered:</b> Fall, Spring, Summer. | Grade Earned: _____ |
| <input type="checkbox"/> MAN 2582 - Introduction to Project Management, Credit Hours: 3. <b>Terms Offered:</b> Fall, Spring, Summer.                     | Grade Earned: _____ |

#### Term 2

- |  |                     |
|--|---------------------|
| <input type="checkbox"/> CTS 2437C - SQL Server I - Fundamentals, Credit Hours: 3. <b>Terms Offered:</b> Fall, Spring, Summer. | Grade Earned: _____ |
| <input type="checkbox"/> COP 2822C - Web Technologies, Credit Hours: 4. <b>Terms Offered:</b> Fall, Spring, Summer.            | Grade Earned: _____ |
| <input type="checkbox"/> CIS 2321 - Information Systems, Credit Hours: 3. <b>Terms Offered:</b> Fall, Spring.                  | Grade Earned: _____ |
| <input type="checkbox"/> Professional Elective course, Credit Hours: 3.  | Grade Earned: _____ |

#### Term 3

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|---|---------------------|
| <input type="checkbox"/> Professional Elective course, Credit Hours: 3. | Grade Earned: _____ |
| <input type="checkbox"/> Professional Elective course, Credit Hours: 3. | Grade Earned: _____ |

### Sample Roadmap for Java Track

#### Term 1

Before enrolling in your first term classes, **please meet with an advisor** for specific guidance about your academic plan.

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|--|---------------------|
| <input type="checkbox"/> COP 1000C - Introduction to Computer Programming, Credit Hours: 3. <b>Terms Offered:</b> Fall, Spring, Summer.                  | Grade Earned: _____ |
| <input type="checkbox"/> CGS 1100C - Microcomputer Applications for Business and Economics, Credit Hours: 3. <b>Terms Offered:</b> Fall, Spring, Summer. | Grade Earned: _____ |
| <input type="checkbox"/> MAN 2582 - Introduction to Project Management, Credit Hours: 3. <b>Terms Offered:</b> Fall, Spring, Summer.                     | Grade Earned: _____ |

#### Term 2

- |  |                     |
|--|---------------------|
| <input type="checkbox"/> CTS 2437C - SQL Server I - Fundamentals, Credit Hours: 3. <b>Terms Offered:</b> Fall, Spring, Summer.   | Grade Earned: _____ |
| <input type="checkbox"/> <i>Select from:</i><br>COP 2551C - Introduction to Object Oriented Programming with Java, Credit Hours: 3. <b>Terms Offered:</b> Fall, Spring, Summer.<br>or COP 2800C - Java 1, Credit Hours: 3. <b>Terms Offered:</b> Fall, Spring. | Grade Earned: _____ |

#### Term 3

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|--|---------------------|
| <input type="checkbox"/> COP 2805C - Advanced Java Programming, Credit Hours: 3.<br><b>Terms Offered:</b> Fall 2025, Spring 2026, Summer 2026, Spring 2027, Summer 2027. | Grade Earned: _____ |
| <input type="checkbox"/> COP 2822C - Web Technologies, Credit Hours: 4. <b>Terms Offered:</b> Fall, Spring, Summer.  | Grade Earned: _____ |

#### Term 4

- |   |                     |
|---|---------------------|
| <input type="checkbox"/> CIS 2321 - Information Systems, Credit Hours: 3. <b>Terms Offered:</b> Fall, Spring.                                 | Grade Earned: _____ |
| <input type="checkbox"/> COP 2806C - Developing Enterprise Applications Using Java EE, Credit Hours: 3. <b>Terms Offered:</b> Spring, Summer. | Grade Earned: _____ |

### Sample Roadmap for Visual Basic.NET Track

#### Term 1

Before enrolling in your first term classes, **please meet with an advisor** for specific guidance about your academic plan.

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|--|---------------------|
| <input type="checkbox"/> COP 1000C - Introduction to Computer Programming, Credit Hours: 3. <b>Terms Offered:</b> Fall, Spring, Summer.                  | Grade Earned: _____ |
| <input type="checkbox"/> CGS 1100C - Microcomputer Applications for Business and Economics, Credit Hours: 3. <b>Terms Offered:</b> Fall, Spring, Summer. | Grade Earned: _____ |
| <input type="checkbox"/> MAN 2582 - Introduction to Project Management, Credit Hours: 3. <b>Terms Offered:</b> Fall, Spring, Summer.                     | Grade Earned: _____ |

#### Term 2

- |  |                     |
|--|---------------------|
| <input type="checkbox"/> CTS 2437C - SQL Server I - Fundamentals, Credit Hours: 3. <b>Terms Offered:</b> Fall, Spring, Summer.       | Grade Earned: _____ |
| <input type="checkbox"/> COP 2822C - Web Technologies, Credit Hours: 4. <b>Terms Offered:</b> Fall, Spring, Summer.                  | Grade Earned: _____ |
| <input type="checkbox"/> CIS 2321 - Information Systems, Credit Hours: 3. <b>Terms Offered:</b> Fall, Spring.                        | Grade Earned: _____ |
| <input type="checkbox"/> COP 2837C - Introduction to Programming with Visual Basic.NET, Credit Hours: 3. <b>Terms Offered:</b> Fall. | Grade Earned: _____ |

#### Term 3

- |   |                     |
|---|---------------------|
| <input type="checkbox"/> COP 2823C - ASP.NET Programming, Credit Hours: 3. <b>Terms Offered:</b> Summer.        | Grade Earned: _____ |
| <input type="checkbox"/> COP 2842C - Internet Programming, Credit Hours: 4. <b>Terms Offered:</b> Fall, Spring. | Grade Earned: _____ |

## Course Requirements

Prerequisites, corequisites, and conditions for any course are subject to change. Students must meet the prerequisite and corequisite requirements of any course at the time the student attempts to register for that course. If you have questions about the prerequisites, corequisites, or conditions for a course, please contact any academic advisor.

### Professional Courses

Complete all of the following courses.

**CGS 1100C - Microcomputer Applications for Business and Economics**, Credit Hours: 3. **Prerequisite(s)**: None. **Corequisite(s)**: None. **Conditions**: None. **Terms Offered**: Fall, Spring, Summer.

**CIS 2321 - Information Systems**, Credit Hours: 3. **Prerequisite(s)**: CGS 1100C. **Corequisite(s)**: None. **Conditions**: None. **Terms Offered**: Fall, Spring.

**MAN 2582 - Introduction to Project Management**, Credit Hours: 3. **Prerequisite(s)**: None. **Corequisite(s)**: None. **Conditions**: None. **Terms Offered**: Fall, Spring, Summer.

**COP 1000C - Introduction to Computer Programming**, Credit Hours: 3. **Prerequisite(s)**: None. **Corequisite(s)**: None. **Conditions**: Suggested Course: MAT 1033 with a grade of C or higher or satisfactory score on mathematics placement test. **Terms Offered**: Fall, Spring, Summer.

**COP 2822C - Web Technologies**, Credit Hours: 4. **Prerequisite(s)**: COP 1000C. **Corequisite(s)**: None. **Conditions**: None. **Terms Offered**: Fall, Spring, Summer.

**CTS 2437C - SQL Server I - Fundamentals**, Credit Hours: 3. **Prerequisite(s)**: COP 1000C. **Corequisite(s)**: None. **Conditions**: None. **Terms Offered**: Fall, Spring, Summer.

### Professional Elective Courses

Select one of the following tracks.

#### C Language Track Courses

Complete three of the following courses.

**COP 2220C - C Programming**, Credit Hours: 3. **Prerequisite(s)**: COP 1000C. **Corequisite(s)**: None. **Conditions**: None. **Terms Offered**: Fall, Spring, Summer.

**COP 2334C - Object-Oriented Programming with C++**, Credit Hours: 3. **Prerequisite(s)**: COP 1000C with a grade of C or higher. **Corequisite(s)**: None. **Conditions**: Recommended: COP 2220C. **Terms Offered**: Spring, Summer.

**COP 2360C - Introduction to C#**, Credit Hours: 3. **Prerequisite(s)**: COP 1000C. **Corequisite(s)**: None. **Conditions**: None. **Terms Offered**: Fall.

**COP 2823C - ASP.NET Programming**, Credit Hours: 3. **Prerequisite(s)**: COP 2837C or COP 2360C. **Corequisite(s)**: None. **Conditions**: None. **Terms Offered**: Summer.

#### Java Track Courses

Complete COP 2551C or COP 2800 and complete all other listed courses.

**COP 2551C - Introduction to Object Oriented Programming with Java**, Credit Hours: 3. **Prerequisite(s)**: COP 1000C with a grade of C or higher. **Corequisite(s)**: None. **Conditions**: None. **Terms Offered**: Fall, Spring, Summer.

**COP 2800C - Java 1**, Credit Hours: 3. **Prerequisite(s)**: COP 1000C with a grade of C or higher. **Corequisite(s)**: None. **Conditions**: None. **Terms Offered**: Fall, Spring.

**COP 2805C - Advanced Java Programming**, Credit Hours: 3. **Prerequisite(s)**: COP 2551C or COP 2800C each with a grade of C or higher. **Corequisite(s)**: None. **Conditions**: None. **Terms Offered**: Fall 2025, Spring 2026, Summer 2026, Spring 2027, Summer 2027.

**COP 2806C - Developing Enterprise Applications Using Java EE**, Credit Hours: 3. **Prerequisite(s)**: COP 2805C. **Corequisite(s)**: None. **Conditions**: None. **Terms Offered**: Spring, Summer.

#### Visual Basic.NET Track Courses

Complete all of the following courses.

**COP 2837C - Introduction to Programming with Visual Basic.NET**, Credit Hours: 3. **Prerequisite(s)**: COP 1000C. **Corequisite(s)**: None. **Conditions**: None. **Terms Offered**: Fall.

**COP 2823C - ASP.NET Programming**, Credit Hours: 3. **Prerequisite(s)**: COP 2837C or COP 2360C. **Corequisite(s)**: None. **Conditions**: None. **Terms Offered**: Summer.

**COP 2842C - Internet Programming**, Credit Hours: 4. **Prerequisite(s)**: COP 2822C. **Corequisite(s)**: None. **Conditions**: None. **Terms Offered**: Fall, Spring.