

# IT-SOFTWARE DEVELOPMENT SPECIALIST

## Overview

### IT-Software Development Specialist Technical Diploma

**Program Code: 30-152-5**

For more information: [wctc.edu/software-dev-specialist](https://www.wctc.edu/software-dev-specialist) (<https://www.wctc.edu/software-dev-specialist/>)

Software development specialists work to create and modify general computer applications and software to provide solutions to various business needs. In this program, develop a solid foundation in Java Programming, architecture and database skills. Upon completion of the diploma program, possess the skills to build stand-alone and client-server applications, including web applications.

**The minimum required course grades and program grade point average (GPA) for students under this catalog are:**

Core Courses = C

General Studies Courses = C

Program GPA = 2.0

**Build your degree along a career pathway.** Start with a couple of courses or an entry-level credential to enter the job market in your area of interest, then continue with higher credentials on your educational path for job advancement and higher wages.

## Career Pathway

1. IT Software Development Specialist 18
2. IT Mobile Programmer 27
3. IT Web and Software Developer 64

**Related Certificate you can earn along the way.**

- Java Programming Technical Certificate (<https://catalog.wctc.edu/programs/java-programming/>)

## Learning Outcomes

### Program Outcomes

1. Design applications.
2. Utilize essential data technologies.
3. Develop basic applications.

## Critical Life Skills

To help our students prepare for success in a workplace and society that is **increasingly global, multi-cultural, and collaborative**, all students are given opportunities to develop and demonstrate Critical Life Skills, both in and out of the classroom. The following Critical Life Skills are learning outcomes for WCTC students.

- **Communication:** Demonstrate appropriate communication.
- **Critical Thinking/Problem Solving:** Demonstrate critical thinking skills to analyze situations and solve problems.

- **Relationships:** Demonstrate effective interpersonal skills.
- **Self-management:** Demonstrate responsible and respectful behavior.

## Required Courses

Listed below are the required courses for the program. To view the recommended sequence for taking courses click on the plan of study tab(s) above. Work with your Academic Advisor to design a program plan!

View your **Program Matrix** to find out when each course will be offered (term and time of day).

Code	Title	Credits
<b>Core Courses</b>		
152-105	Intro to Web Development	2
Approved Substitute: 201-110		
152-112	Intro to Programming with C#	3
152-130	Introduction to Java	2
Approved Substitutes: 152-134 OR 152-138		
152-131	Software Architecture	2
Approved Substitute: 152-135		
152-197	Distributed Java	3
Approved Substitute: 152-198		
156-108	Intro to Databases & Reporting	1
Approved Substitute: 152-115		
156-109	Intro to SQL	2
Approved Substitute: 152-115		
<b>General Studies</b>		
804-133	Math & Logic	3
Approved Substitutes: 804-118 OR 804-116 OR 804-195 OR 804-198		
<b>Total Credits</b>		<b>18</b>

## Full-time Plan

<b>First Year</b>		
<b>Fall Term 1</b>		<b>Credits</b>
152-105	Intro to Web Development	2
152-112	Intro to Programming with C#	3
156-108	Intro to Databases & Reporting	1
<b>Credits</b>		<b>6</b>
<b>Fall Term 2</b>		
156-109	Intro to SQL	2
804-133	Math & Logic	3
<b>Credits</b>		<b>5</b>
<b>Spring Term 1</b>		
152-130	Introduction to Java	2
<b>Credits</b>		<b>2</b>
<b>Spring Term 2</b>		
152-131	Software Architecture	2
<b>Credits</b>		<b>2</b>

**Second Year**

**Fall Term 1**

152-197	Distributed Java	3
<b>Credits</b>		<b>3</b>
<b>Total Credits</b>		<b>18</b>