

# Software Testing Certificate Program

## Frequently Asked Questions

Thank you for your interest in our Software Testing Certificate Program. Below are answers to questions we frequently receive from students. If you don't find the answer to your question below, please contact us at (425) 564-4005.

### **Who has created this program?**

The program was created by the Computers & Technology department with input from industry professionals.

### **What can I do as a software tester?**

Some of the job titles in Software Testing include Applications or Systems Software Tester, Quality Assurance Tester, Database Tester, Test Software Designer, Software Test Engineer, Game Tester

The primary job skills associated with Software testing are:

The ability to work closely with programmers and program managers to understand product requirements and functionality and design tests to verify features and functionalities. Software testers perform all aspects of product testing including functional, regression, performance, usability, and acceptance testing to identify and report bugs. Some testers may analyze and design databases within an application area, working individually or coordinating database development as part of a team. They may test operating systems-level software, compilers and network distribution software for medical, industrial, military, communications, aerospace, business, scientific, and general computing applications. Apply principals and techniques of computer science, engineering and mathematical analysis.

### **What industries employ software testers?**

According to the Washington State Employment Security Department, the top 15 industries that employ software testers in King County are (for more details see <http://www.workforceexplorer.com>):

Prepackaged Software  
Computer Integrated Systems Design  
Computer Processing and Data Preparation  
Information Retrieval Services  
State Government  
Aerospace  
Online Retailers  
Telecommunications

### **Are there websites listing software testing jobs?**

Yes, there are both industry specific and many general websites you can search for Software Testing jobs. The list below is an example only and we do not endorse any specific company.

Industry Specific:

[www.softwaretester.com](http://www.softwaretester.com)

[www.monster.com](http://www.monster.com)

<http://members.microsoft.com/careers/default.msp>

[www.gajobs.com](http://www.gajobs.com)

<http://www.sasqag.org/>

### **What are the technical and non-technical skills a software tester needs to have?**

Because software is used in just about everything these days it would be impossible to come up with a set list of required technical skills. These skills can vary immensely from industry to industry. For

instance, a tester working on a banking application might be required to have accounting skills while a tester in the aerospace industry may have to know about jet propulsion! The following list provides just some of the basic common technical skills potential job seekers **might** find in a job posting.

#### **Technical:**

- Programming skills – automated testing
- Knowledge of various languages (C#, Python, VB, C++, Java, Javascript)
- Winrunner/ SilkTest – automation tools
- Database Design/Use – SQL
- Client/Server relationship
- Web Technologies – HTML, XML, ASP, SOAP
- Internet and networking protocols
- .Net
- Testing Methodologies and Practices
- Test Plan/Case development
- Familiar with Windows or Unix O/S

#### **Non-Technical:**

- Creative, detailed oriented with a motivation to solve problems. Requires discipline and perseverance to find and reproduce bugs.
- The desire to break things – find faults with the program in order for development to make it better.
- Team player.
- Ability to communicate effectively (verbal as well as written).
- Willingness to take a project to completion, even if it means working long or extra hours, will help build a reputation for reliability.

#### **If I have no experience and do this program, are there entry-level jobs and what is the salary range?**

After finishing this program you will have enough tools to be successful as an entry-level software tester. Often you will be working with a team and learn from the best. The salary range depends on many things and we suggest you look at the U.S. Department of Labor, Bureau of Labor Statistics, Occupational Outlook Handbook <http://www.bls.gov/oco/ocos267.htm>. In addition labor market information for King County and Washington State is available on <http://www.wilma.org/wdclists/>.

#### **Is this a new certificate program?**

No, the program was introduced over nine years ago and has trained hundreds of students.

#### **How does the program work?**

The Software Test Engineer Certificate (STE) will usually take up to a year on a part-time basis to complete, but it needs to be completed in no more than 13 quarters from the quarter when you take your first class. **Students may have an additional year to complete the subsequent certificates—the Software Test and Development Engineer (STDE) and the Database Test Engineer (DTE).**

#### **How do I get my certificate when I finish the courses?**

You must complete all required and elective courses in your program before receiving a Certificate of Completion. Once you've completed all your courses, click here to [Request a Certificate of Completion](#). You'll be asked to complete a brief program survey, and then will be directed to the certificate request page. Your request will be forwarded electronically to an advisor for review. You will be contacted by the college if there are any questions. You can expect to receive your Certificate of Completion in the mail about three weeks after filling out your request. We recommend you retain a "Certificate of Completion" for each completed required and elective class as it is the backup record of successful class completion.

#### **How did you come up with the classes in this program?**

We worked with Software Testing industry professionals who helped us select classes that best represented the set of skills testers need to possess to succeed in the Software Testing field.

## What are the required classes for each Certificate?

### Software Test Engineer Certificate (STE)

- **7 required classes**
- **2 elective classes.** Electives can be chosen from the list of required and elective classes for the Software Test and Development Engineer (STDE) or Database Test Engineer (DTE) certificates (see below.) They can also come from the Database or Programming sections of class listings.

#### Core classes:

- Introduction to Testing
- Software Testing in Practice
- Test Project Planning and Management
- Database Testing Concepts
- Scripting/Programming Fundamentals
- C# for Testers
- .NET Test Automation using C#

### Software Test and Development Engineer (STDE)

- **Completion of STE Certificate (see above)**
- **4 required classes**
- **2 elective classes**

#### Core classes:

- C# Programming – Level 2
- Object Oriented Programming Principles
- C++ Programming – Level 1
- Algorithms in .NET

#### Suggested Elective classes:

- C# Programming – Level 3
- Client-Server Testing Techniques
- SQL for Software Test Engineers – Level 1
- SQL for Software Test Engineers – Level 2

### Database Test Engineer (DTE)

- **Completion of STE Certificate (see above)**
- **3 required classes**
- **1 elective classes**

#### Core classes:

- Client-Server Testing Techniques
- SQL for Software Test Engineers – Level 1
- SQL for Software Test Engineers – Level 2

#### Suggested Elective classes:

- T-SQL Programming
- SQL Server 2008 Introduction
- SQL Server 2008 Analysis Services (SSAS) and Business Intelligence

## Is there a minimum number of classes I need to take per quarter?

The program was created with a busy student in mind. It is up to you how many classes you take in a quarter. Our only requirement is that you complete the certificate within 13 quarters after taking the first class.

**Are there any prerequisites?**

There are no prerequisites to start in the program. It is recommended that you have understanding of Windows (file/folder management, menus, shortcuts, and layout) prior to taking the specific Software Testing computer courses.

**Do you have to take classes in a specific order?**

You can take classes in any order except where noted otherwise (for example, you will need to take the Introduction to Software Testing class before taking Software Testing in Practice). Taking the core classes in the order outlined above is recommended, however common entry points for students are Introduction to Testing, Database Testing Concepts and Scripting/Programming Fundamentals, none of which have prerequisites other than knowledge of Windows.

Some electives may be taken prior to completing the core classes. Be sure to check the prerequisites for any electives prior to registering.

**What if I have an extensive experience in some of the topics taught? Can I skip or substitute classes?**

Yes, on case-by-case basis and subject to approval based on work history/experience and prior education, **one** of the required classes might be substituted with an elective class. However, students must still complete the total number of required/substituted classes and elective classes. To request a class substitution, please fill out the [Software Testing Class Substitution Request.pdf](#)

**If I have significant industry testing experience can I obtain the SDTE or DTE certificate without first obtaining an STE certificate?**

All requests to bypass the STE certificate requirement will be handled on a case-by-case basis. Students will be required to provide sufficient evidence of experience in all testing areas covered by the STE certificate.

**Is there a formal sign-up for this certificate program?**

No there is no formal entry process.

**What happens if I'm close to the end of the program and a class is cancelled or not given that quarter?**

We will allow for an extension or select/approve a substitute class for you to complete the program.

**Where are the classes held?**

These classes are held at the BCC North Campus. The current quarterly print and web schedule always specifies the room where each class meets.

**Are these classes software specific?**

C#, SQL and a few other classes may use specific software.

**Do we have to buy this software?**

You do not need to purchase the software to take your class. However, we are assuming you want to work in the Software Testing field and as such you might need to have your own software, especially if you work as a freelancer. As a BC student you can purchase heavily discounted full version software at our bookstore. This software is for academic purposes only. Software for student use is also available in the computer lab at North Campus.

**What kinds of Computers do you use?**

Our classrooms are equipped with PCs with current versions of software to provide cutting-edge education.

**What is the approximate cost of tuition and books?**

- Please check the BCC class schedule or website for current class prices. Books are listed below.

### Which classes require you to purchase textbooks, and what are the prices?

The following classes will require you to purchase your book separately. If you do not see the class listed below, the book is included in the class price. Book prices are subject to change and are available in our North Campus bookstore.

- **Introduction to Testing:** Testing Computer Software, 2<sup>nd</sup> Edition, \$65
- **Software Testing in Practice:** Testing Computer Software, 2<sup>nd</sup> Edition, \$65
- **Test Project Planning and Management:** Managing the Testing Process, Practical Tools and Techniques for Managing Hardware and Software Testing, 2<sup>nd</sup> Edition, \$30
- **Database Testing Concepts:** Database Design for Mere Mortals, 3rd Edition, \$38
- **C# for Testers:** Learning C# 3.0, 3<sup>rd</sup> edition, \$30
- **.NET Test Automation using C#:** Testers Guide to .NET Programming, \$54
- **Client-Server Testing Techniques:** Testing Applications on the Web-2<sup>nd</sup> Edition, \$33
- **SQL for Software Test Engineers – Level 1:** SQL Queries for Mere Mortals, 2<sup>nd</sup> edition \$38
- **SQL for Software Test Engineers – Level 2:** SQL Queries for Mere Mortals, 2<sup>nd</sup> edition \$38

*(note – book prices listed are approximate and are subject to change)*

### May I re-take a class if I miss a session or want a refresher?

Students in the Software Testing Certificate program may retake any of the following courses:

Introduction to Testing  
Software Testing in Practice  
Test Project Planning & Management  
Database Testing Concepts  
Scripting/Programming Fundamentals

C# for Testers  
.NET Test Automation using C#  
Client-Server Testing Techniques  
SQL for Software Test Engineers – Level 1  
SQL for Software Test Engineers – Level 2

All students must notify BCC, Continuing Education's registration office before attending any retake courses and *are not permitted to register until the business day prior to the start of class and then only on a space-available basis*. Students must show a photo ID to the registrar at the time of registration and to the instructor during the class.

A Request for Course Retake form will be completed at the registration counter at North Campus in person. Courses may only be retaken once and it must be within four quarters of when you took the original class. There is a \$25 retake fee.

### How can I register for the classes?

- You may call Customer Service at (425) 564-2263, or register in person at the North Campus (10700 Northup Way, Bellevue) or Main Campus (3000 Landerholm Circle SE, Bellevue)
- On the web at [www.conted.bcc.ctc.edu](http://www.conted.bcc.ctc.edu)
- By fax at (425) 564-3113

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