

### **Get on Track**

In 18-24 months gain marketable skills to get hired in positions currently paying:

	Annual Salary	<b>Hourly Wage</b>
Entry-Level	\$44,140	\$21.22
Median	\$77,550	\$37.28
Experience	\$127,640	\$61.36

**Note:** Earnings exclude benefits. Median earnings represent the wage at which half of the workers in the occupation earned more than that amount.

The Computer Science program prepares students for a variety of industries, professions, and sectors, including programming, databases, security, software development and analysis, among others. Enrolled students can earn an associate degree or short-term certificate to meet industry needs.

## **Faculty**

**Dr. Tahir Aziz** – Professor of Computer Science and Information Technology. Dr. Aziz has a Ph.D. in Information Technology from Capella University, MBA in eCommerce from National University, and Bachelors in Information Systems from CSULB. He teaches various programming languages, including C++ and C#. He also teaches Android App Development and Systems Analysis, among other classes. He has been a full-time faculty member of Long Beach City College since 2005.

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Kimberly S. Davis - Professor of Computer Science. Master in Business Administration from Bethel University and Bachelor of Arts in Computer Science from Talladega College. She teaches Java and VB, but has also taught other computer science courses, including C++, Systems Analysis and Design, Data Structures & Algorithms, & a few online courses. Kimberly has been teaching at Long Beach City College since 2016.

kdavis@lbcc.edu

Kyle Muldrow - Professor of Computer Science. Prof. Muldrow has a Master of Science degree in Mathematics from the University of Illinios and a Bachelor of Science degree in Applied Mathematics from the University of Missouri-St.Louis. He currently teaches classes in Java, Computer Architecture, and Android Development with Java. He has also taught other Computer Science and math classes. Kyle has been teaching for Long Beach City College since 2018.

#### **Computer and Office Studies**

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Visit our Website www.LBCC.edu/COS

Computer

Science

ASSOCIATE DEGREE

LONG BEACH
CITY COLLEGE
www.LBCC.edu/COS



# Professional Training = QUALIFIED EMPLOYEES

Visit www.LBCC.edu/COS for more details about the Computer Science program.

#### CS11 - Intro. to Computer Science - C++

This is an introductory course in the C++ programming language, a problem solving technique used in modern software technology. The features of C++ that support the development of small and large systems are covered, thus providing a method for prototyping the commercial software development in business and industry.

#### CS21 - Intro. to Computer Science - Java

This course introduces Computer Science and the Java programming language. It will cover the basics of programming and software design using a procedure oriented approach.

#### **CS22 - Data Structures and Algorithms**

This course covers the application of software engineering techniques for the design and development of large programs, and will include the topics of data abstraction and structures with their associated algorithms.

#### **CS51 - Computer Architecture**

This course covers the organization and behavior of real computer systems at the assembly-language level. The mapping of statements and constructs in a high-level language onto sequences of machine instructions is studied, as well as the internal representation of simple data types and structures. Numerical computation is examined, noting the various data representation errors and potential procedural errors.

#### **CS61 - Discrete Structures**

This course is an introduction to the discrete structures used in Computer Science with an emphasis on their applications. Topics covered include: Functions, Relations and Sets; Basic Logic; Proof Techniques; Basics of Counting; Graphs and Trees; and Discrete Probability.

## What is Computer Science?

A program that focuses on computer theory, computing problems and solutions, and the design of computer systems and user interfaces from a scientific perspective. Includes instruction in the principles of computational science, computer development and programming, and applications to a variety of end-use situations.

With a solid foundation in Computer Science, Computer Programming, and other computer related occupations, the computer science specialist brings innovation, creativity, productivity, and unique solutions to an organization.

Graduates of the Computer Science program also bring indispensable critical thinking, problem solving, and interpersonal skills to the workplace, essential components of the curriculum.

Visit www.LBCC.edu/COS for more details about the program.

## **Get Started Today**

Computer Science, 2 Year Associate Degree(60 units)

The mission of the Computer Science degree program is to provide students with a professional, current, and strategically designed set of classes to secure entry level employment in Computer Science or IT. This degree will help students succeed after transferring to a CSU or UC School Computer Science major program, or it will benefit them in the transfer to related four year degree program in other universities.

Recommended Plan – 15 units per semester (Core + 19 GE + Electives) = 60 total

