

**PROGRAM APPROVAL APPLICATION**  
**NEW or SUBSTANTIAL CHANGE or LOCALLY APPROVED**  
**(This application may not exceed 3 pages)**

**Fill In Form**

Certificate of Achievement – Computer Technology

Proposed Program Title

Long Beach City College

College

Long Beach Community College District

District

Fall 2015

Projected Program Start Date

Brent Gilmore

Voting Member

Director of Academic Services

Title

562-938-4311

Phone Number

bgilmore@lbcc.edu

E-mail Address

**Goal(s) of Program (Check all that apply):**

Career Technical Education (CTE)

Transfer

Other

**Type of Program (Check all that apply):**

A.S. Degree

A.A. Degree

Certificate of Achievement:

18+ semester (or 27+ quarter) units

12-18 semester (or 18-27 quarter) units

**Reason for Approval Request: (Check One)**

New Program

Substantial Change

Locally Approved

**Program Information**

Recommended Taxonomy of Program (TOP) Code 070100

Units for Major-Degree [Click here to enter text.](#)

Total Units for Degree [Click here to enter text.](#)

Required Units-Certificate 32

**Written Form**

1. Insert the description of the program as it will appear in the catalog.  
Certificate of Achievement – Computer Technology

The Certificate of Achievement in Computer Technology is designed to provide students with a broad base of software development skills to prepare them for software engineering and web-development careers. Students gain practical skills in Java and Visual Basic programming and the development of dynamic web services. Students will also study software design, computer usage and computer hardware to ensure broad based competencies.

2. Provide a brief rationale for the program.

With the increased reliance on computers, networks, the internet, and intranets, there will be a steady demand for qualified, experienced workers who understand the advantages and limitations of a wide variety of technology solutions.

3. List all courses required for program completion, including core requirements, restricted electives and prerequisites. (Push Enter after each entry to begin a new line)

Courses	Course No.	Course Title	Units
<b>Required Major Course work</b>	COSA 50	Introduction to IT Concepts & Applications	
	COSN 5	Computer Technician Hardware Basics	4.0
	COSP 7	Business Programming Logic & Design	4.0
	COSP 8	Visual BASIC Programming	4.0
	COSW 20	Dynamic HTML Web Construction	4.0
	CS 21	Java: Computer Science 1	4.0
	STATS 1	Elementary Statistics	3.0
	MATH 50	Precalculus Mathematics	5.0
		<b>Total Units</b>	<b>32</b>

4. Summarize the Labor Market Information and employment outlook (including citation of the source of the data) for students exiting the program.

Program completers will be qualified for entry-level employment in the following occupations: Web Developer (SOC 15-1134), Computer Programmer (SOC 15-1131), Application Software Developer (SOC 15-1132), and System Software Developer (SOC 15-1133). The program will enable student entry directly into employment after completion, or will facilitate employment after further education. LMI data supports the addition of the program at LBCC. The following summarizes the aggregate LMI in Los Angeles County for the occupations listed above:

- The 2012-2022 job change is 4,185 jobs (12.2%) with the largest growth being in Web Developers (927 jobs, 21%)
- The median hourly earnings for Web Developers is \$31.84; 4% higher than the national median wage; and median hourly earnings for the other occupations listed above is \$50.17; 10% higher than the national median wage.
- For Web Developers, there were 1,623 employment openings in August 2015, and 6,670 unique job postings
- For Computer Programmers, there were 20,337 total job postings with 5,224 unique postings as of August 2015
- The primary regional program that prepares students for these occupations is Web Page, Digital/Multimedia and Information Resources Design (CIP 11.0801).
  - In 2013 there were 172 regional completions. Of these, only 1 completion was from a regional community college. All other completions were from private colleges. The number of completions from regional community colleges is less than demand indicating a regional need

The strong regional growth, high wage, and net demand in Los Angeles County warrant LBCC offering this new certificate in the region.

5. List similar programs at other colleges in the Los Angeles and Orange County Region which may be adversely impacted. (Push Enter after each entry to begin a new line)

College	Program	Who you Contacted	Outcome of Contact
Cerritos College	Computer Information Systems	Reviewed website	No certificate in Computer Technology
Cypress College	Computer Information Systems	Reviewed website	No certificate in Computer Technology
Fullerton College	Computer Science	Reviewed website	No certificate in Computer Technology
Golden West College	Computer Science	Reviewed website	No certificate in Computer Technology
El Camino College	Computer Science	Reviewed website	No certificate in Computer Technology
Los Angeles Harbor College	Computer Science	Reviewed website	No certificate in Computer Technology
Orange Coast College	Computer Science	Reviewed website	No certificate in Computer Technology
Santa Ana College	Computer Science	Reviewed website	No certificate in Computer Technology

6. Include any other information you would like to share.  
 None