

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

Fill In Form

Programming Certificate

Proposed Program Title

FULLERTON COLLEGE

College

FALL 2017

Projected Program Start Date

North Orange County Community College District

District

Contact Information

DR. DOUGLAS BENOIT

Voting Member

714-992-7033

Phone Number

Dean, Business and CIS Division

Title

dbenoit@fullcoll.edu

Email

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

Career Technical Education (CTE)

Transfer

Other

Type of Program (Check all that apply):

Certificate of Achievement 12-17 (or 17-27 quarter) units

Certificate of Achievement 18+ semester (or 27+ quarter) units

Associate of Science Degree

Associate of Arts Degree

Reason for Approval Request (Check One):

New Program

Substantial Change

Locally Approved

Program Information

0707.10 Recommended [Taxonomy of Program \(TOP\) Code](#)

Units for Major-Degree

Total Units for Degree

34-35 Required Units-Certificate

Written Form

1. Insert the description of the program as it will appear in the catalog. (See PCAH pp. 142 and 170)

The Programming Certificate is designed to prepare students for an entry-level job in the programming field. Students receive a grounding in a breadth of current programming languages and may select electives focusing on web programming, Java and mobile applications programming, database management or game programming. A minimum grade of C is required in each course taken. This certificate requires 34-35 units.

2. Provide a brief rationale for the program.

Six-Year Review. Certificate has been completely re-written to better meet needs of students and the workplace. New certificate provide pathways in different topics such as Java/Mobile, database and gaming.

3. Summarize the Labor Market Information (LMI) and employment outlook (including citation for the source of the data) for students exiting the program. (See PCAH pp. 85-88, 136, 147, 148, 165, 168, and 176)

		2014 Jobs	2017 Jobs	2014-17 Change	% Change 2014-17	Openings (New + Replacements)	Annual Openings	10% Hourly Earnings	Median Hourly Earnings
15-1131	Computer Programmers	40,694	43,843	3,148	7.70%	6,684	2,228	\$21.97	\$40.57

The three-year average supply from regional colleges is 136 per year.
 Regional annual openings for the SOC code listed above is 459, indicating a gap of 323 hires.
 Source: <http://coecc.net/supply-demand/> For Orange County

4. List similar programs at other colleges in the Los Angeles and Orange County Region which may be adversely impacted. (There is space for 10 listings, if you need more, please contact laocrc@rscdd.edu)

College	Program	Who You Contacted	Outcome of Contact
Cerritos College	Programmer Cert	Nick Real	No response.
East Los Angeles College	Computer SCI Info	Christopher Whiteside	No response.
El Camino College	Computer Science Cert	Virginia Rapp	No response.
Glendale Community College	Computer Programmer Cert	Jan Swinton	No response.
Golden West College	Computer Science Cert	David Gatewood	No response.
Irvine Valley College	Computer Languages Cert	Corine Doughty	No response.
Los Angeles City College	Programming Languages Cert	Alex Davis	No response.
Los Angeles Pierce College	Programmer for Business Cert	Jose Luis Fernandez	No response.
Mt San Antonio College	Programming in C++	Jemma Blake-Judd	No response.
Saddleback College	Computer Science Cert	Anthony Teng	No response.

5. List all courses required for program completion, including core requirements, restricted electives and prerequisites. (There is space for 20 listings, if you need more, please contact laocrc@rscdd.edu). (See PCAH pp. 143 and 171)

Required Courses (25 units) Units

CIS 130 F	Systems Analysis and Design	3
CIS 180 F	Introduction to Networking Concepts	4
CIS 200 F	Fundamentals of Computer Programming	1
CIS 217 F	Visual Basic Programming I	4
CIS 221 F	Introduction to C# Programming	3
CIS 223 F	Programming in C++	3
CIS 226 F	Java Programming I	4
CIS 230 F	PHP and MySQL Programming	3

For a focus on Java and mobile applications, select three courses for 9-10 units.

CIS 222 F	Computer Scripting	3
CIS 227 F	Advanced C# Programming	3
CIS 228 F	Java Programming II	4
CIS 229 F	XML Programming	3
CIS 240 F	Introduction to Mobile Apps	4

or

For a focus on web programming, select three courses for 9 units.

CIS 152 F	Web Design I	3
CIS 157 F	Web Design II	3
CIS 155 F	Web Page Multimedia Design I	3
CIS 255 F	Web Page Multimedia Design II	3

or

For a focus on database management, select three courses for 9 units.

CIS 142 F	Database I	3
CIS 242 F	Database II	3
CIS 270 F	SQL Server Administration	3
CIS 280 F	Introduction to Oracle:SQL and PL/SQL	3
CIS 285 F	Windows Server	3
CIS 286 F	Web Server Management	3

or

For a focus on game programming, select three courses for 9 units.

CISG 110 F	Introduction to Programming for Computer Games	3
CISG 160 F	C# for Game Programming	3
CISG 165 F	C++ For Game Programming	3
CISG 170 F	Java for Game Programming	3
CISG 175 F	Game Programming in Flash	3
CISG 182 F	DirectX Graphics Programming	3
CISG 185 F	Artificial Intelligence in Game Programming	3
CISG 190 F	Programming Multiuser Online Games	3

Total Units 34 – 35

6. Include any other information you would like to share.