

Certificate Programs

COMPUTER SCIENCE

Students are offered a wide variety of courses which fall into three broad categories:

1. Survey and Computer Literacy.
2. Programming languages such as C, Visual Basic, C++, Java, and C#.
3. Advanced topics in Operating Systems, Web Programming, Data Structures, and Video Game Development.

CERTIFICATE OF ACHIEVEMENT

Video Game Development

The Game Development Certificate at Golden West College is designed to prepare students for challenging and rewarding careers in computer-based game development, 3D Graphics Programming, Computer Animation, and other such exciting fields. Students utilize the latest tools to learn about 3D computer graphics, console and PC based games, mobile games, and multiplayer online games. Classes are conducted in smart classrooms with the latest instructional tools. A sizable project is undertaken in each class providing the students with an opportunity to add an exciting project to their portfolios.

Students can apply the skills they learn through this certificate program, to general computing (corporate applications, databases, web applications); entertainment media development (3-D computer animation for film/video); engineering applications (computer-aided manufacturing, robotics, and product simulations); and emerging technologies (artificial intelligence, urban simulation, augmented reality, and biotechnology process simulation).

Year 1

Fall Semester

Computer Science G175	C++ Programming	4
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OR

Computer Science G178	Visual C#.net, or equivalent.	4
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Year 1

Spring Semester

Computer Science G147	Game Programming, Introduction	4
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Year 2

Fall Semester

Computer Science G148	Game Programming, Intermediate	4
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Year 2

Spring Semester

Computer Science G149	Game Programming, Advanced	4
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At least one course from the following selection:

Computer Science G121	Creating Game Artwork, Introduction	4
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Computer Science G150	Mobile Game Programming	4
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Total Units		20
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Get your certificate in:

- Video Game Dev.
- Software Dev.



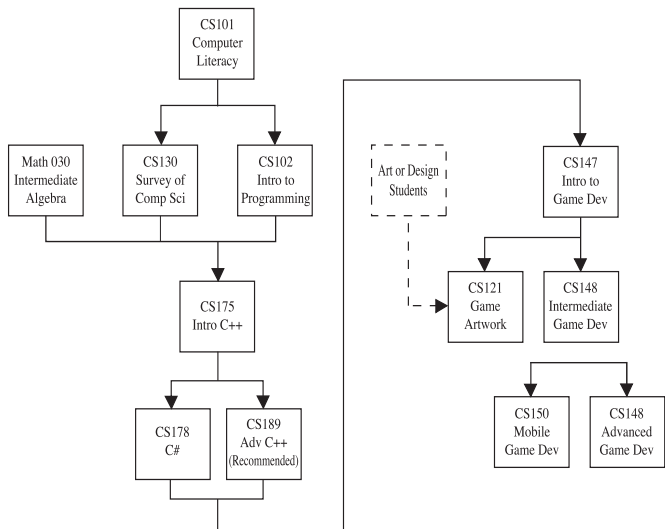
Comp Sci 175 C++



CAREER AND CERTIFICATE PROGRAMS

(continued)

Video Game Development Certificate



Year 1

Spring Semester

Computer Science G175 Programming with C++ 4

AND

Year 2

Fall Semester

Computer Science G178 Visual C#.net 4

PLUS

Computer Science G196 Programming the Web 4

Total Units 16

Recommended for additional breadth, but not required:

Computer Science G127	Intro to Programming with PHP and MySQL	4
Computer Science G130	Survey of Computer Science	4
Computer Science G147	Introduction to Game Programming	4
Computer Science G185	World Wide Web	3
Computer Science G171	Introduction to SQL	4
Computer Science G198	Enterprise Java Development with J2EE	4
Business G100	Intro to Business	3
Business G125	Business English	3
Business G130	Introduction to Business Writing	3
Business G139	Business Communication	3
Work Experience	On the Job Experience	3

CERTIFICATES OF SPECIALIZATION

Software Development

This certificate of specialization is designed to provide the student with background in software development.

Required Courses

Units

Year 1

Fall Semester

Computer Science G102	Computer Software Development, Introduction	4
Math G030	Intermediate Algebra	4

8 units from one of the following groups:

Year 1

Spring Semester

Computer Science G175	C++ Programming	4
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AND

Year 2

Fall Semester

Computer Science G189	Data Structures with C++	4
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OR

Year 1

Spring Semester

Computer Science G153	Java Programming, Introduction	4
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AND

Year 2

Fall Semester

Computer Science G154	Java Data Structures, Advanced	4
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OR

Year 1

Spring Semester

Computer Science G175	C++ Programming	4
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AND

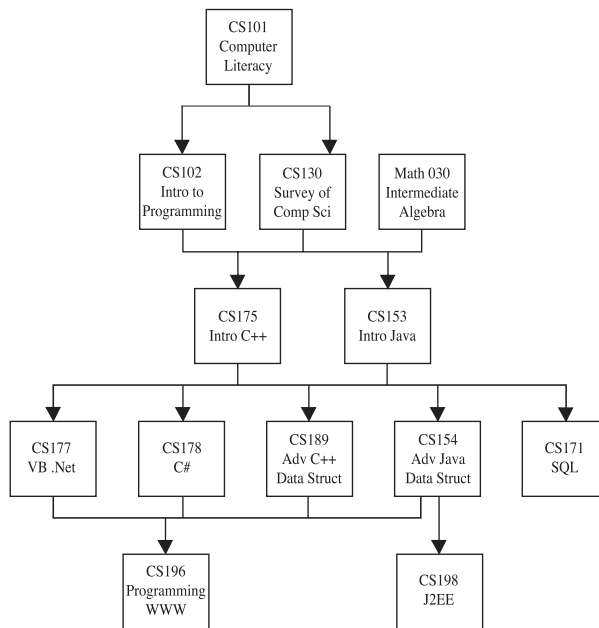
Year 2

Fall Semester

Computer Science G177	Visual Basic.NET	4
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OR

Software Development Certificate



Where a student enters the Computer Science course depends upon the currency of the student's programming skills and information systems background. Students are advised to consult with a GWC counselor (714-895-8119) and if transferring, check the catalog of the transfer university when selecting programming classes.