



20000 68th Ave W  
Lynnwood, WA 98036-5999  
www.edcc.edu

# Computer Science Computer Game Development Certificate Program Requirements 2011-2012

Student Name \_\_\_\_\_  
Student ID \_\_\_\_\_

**Program Description** The electronic entertainment industry has become one of the largest and fastest growing industries in the United States and has a large representation in the Puget Sound area. The Computer Game Development Certificate is designed for people who wish to gain basic skills which will assist them in the development of software for computer graphics, multimedia, and games, and for employment in the electronic entertainment industry. The curriculum includes general programming courses in C/C++, and specialized courses aimed at the design, development and testing of Windows based games using commercial development tools.

The certificate program is offered in either an on-campus or on-line option. For more information about this program, visit <http://gamedev.edcc.edu> or email [gamedev@edcc.edu](mailto:gamedev@edcc.edu).

**Degree Outcomes** Outcomes for Edmonds Community College degrees and certificates can be found in the online college catalog at the bottom of each degree or certificate. To find specific outcomes, click on the degree or certificate from the program list in the online catalog at <http://catalog.edcc.edu>.

**Common Course Numbering Changes** Please refer to [www.edcc.edu/ccn](http://www.edcc.edu/ccn) for more information.

**Prerequisites** ART 225 and ENGL 100 or Accuplacer placement with a combined minimum GPA of 2.5 or permission of the Department of Computer Science is required for admission into the certificate program. MATH& 141 or its equivalent is recommended.

**Credit/Grade Requirements** The Computer Game Development Certificate is awarded upon the completion of **63-66** credits of *General Education/Related Instruction Requirements, Program Requirements and Electives* as outlined. A minimum of 30 credits or one-third, whichever is less, of the required credits must have been received from Edmonds Community College. Students are required to maintain a minimum cumulative grade point average of 2.0 in all college-level courses as well as a minimum grade point average of 3.0 within the program requirements.

**General Education/Related Instruction Requirements** Students who complete degrees or certificates of 45 credits or more are required to demonstrate learning in the following general education/related instruction areas communications, computation/quantitative skills, and human relations/group interaction.

**Cultural Diversity Requirement** Edmonds Community College requires that students earning a degree or certificate of 45 credits or more meet the Cultural Diversity Requirement. Courses that satisfy this requirement are marked as “:CD” on the requirement sheet and/or “Meets Cultural Diversity Requirement” in the quarterly class schedule.

**Students Are Advised To**

- Plan their schedule several quarters in advance in order to accommodate courses that are offered only once or twice a year
- Review the college catalog for required course prerequisites and include these in schedule planning
- Check plans with the appropriate faculty adviser

**Graduation Application** A completed Graduation Application form must be submitted to Enrollment Services by the 10<sup>th</sup> day of the quarter in which the student expects to graduate. Forms are available at Enrollment Services located in Lynnwood Hall, or online at [www.edcc.edu/credentials/](http://www.edcc.edu/credentials/)

To contact us about the Game Development Program call 425-640-1902 or email [gamedev@edcc.edu](mailto:gamedev@edcc.edu)

**College Resources**

Game Certificate Info	<a href="http://gamedev.edcc.edu">http://gamedev.edcc.edu</a>
CS Department	<a href="http://cs.edcc.edu">http://cs.edcc.edu</a>
Home Page	<a href="http://www.edcc.edu">http://www.edcc.edu</a>
How to enroll	<a href="http://getstarted.edcc.edu">http://getstarted.edcc.edu</a>
Bookstore	<a href="http://bookstore.edcc.edu">http://bookstore.edcc.edu</a>
Advising Appointments	425-640-1458

## On-Campus Track

Course	Qtr	Cr	Gr
<b>General Education Requirements (16 credits)</b>			
<b>Communications Skills - 5 credits</b> (Choose ONE of the following)			
ENGL& 101 English Composition I	_____	5	_____
ENGL& 102 Composition II	_____	5	_____
ENGR 231 Intro to Technical Writing	_____	5	_____
BSTEC 110 Business Communications:CD	_____	5	_____
<b>Computation/Quantitative Skills – 5 credits</b>			
CS 115 Intro to Programming	_____	5	_____
<b>Human Relations/Group Interaction*- 5 credits</b>			
_____	_____	5	_____
<b>Career Management - 1 credit</b>			
BSTEC 294 Career Management <b>OR</b>	_____	3	_____
JOBDEV 110 Resumes and Interviewing	_____	1	_____
<b>Program Requirements (50 credits)</b>			
<b>Core requirements - 25 credits</b>			
CS& 131 Computer Science I C++ **	_____	5	_____
CS 132 Computer Science II C++ **	_____	5	_____
CS 161 Computer Game Development I	_____	5	_____
CS 162 Graphics Programming I	_____	5	_____
CS 218 Introduction to C#	_____	5	_____
<b>Electives - 25 credits (choose 5 of the following)</b>			
CS 133 Computer Science III C++ **	_____	5	_____
CS 163 Graphics Programming II	_____	5	_____
CS 185 2D Game Project	_____	5	_____
CS 194 3D Graphics Animation	_____	5	_____
CS 262 3D Graphics Programming I	_____	5	_____
CS 285 3D Game Project	_____	5	_____
CS 290 Software Testing I	_____	5	_____
CS 293 Game Testing	_____	5	_____
<b>or any online elective gaming courses listed to the right</b>			
Total		66	

Cultural Diversity Requirement met \_\_\_\_\_  
Course Number/Quarter

### Explanatory Notes

- \*This requirement is satisfied by the completion of CS 161, 162, 163, 185, or 285
- \*\* CS& 141, CS 142, 143 (Computer Science I, II, III Java) may be substituted for CS& 131, CS 132, 133 with the permission of the department
- \*\*\* Requires extensive previous programming experience in C/C++ or similar language
- \*\*\*\* Online track students may take hybrid section of CS 115 on a totally online basis with instructor permission

## On-Line Track

Course	Qtr	Cr	Gr
<b>General Education Requirements ( 18 credits)</b>			
<b>Communications Skills - 5 credits</b> (Choose ONE of the following)			
ENGL& 101 English Composition I	_____	5	_____
ENGL& 102 Composition II	_____		_____
BSTEC 110 Business Communications:CD	_____		_____
<b>Computation/Quantitative Skills – 5 credits</b>			
CS 115 Intro to Programming ****	_____	5	_____
<b>Human Relations/Group Interaction* - 5 credits</b>			
_____	_____	5	_____
<b>Career Management - 3 credits</b>			
BSTEC 294 Career Management	_____	3	_____
<b>Program Requirements (45 credits)</b>			
<b>Core requirements - 20 credits</b>			
CS 135 C & C++ Review I ***	_____	5	_____
CS 136 C & C++ Review II	_____	5	_____
CS 271 3D Game Dev I DirectX	_____	5	_____
CS 272 3D Game Dev II DirectX	_____	5	_____
<b>Electives - 25 credits (choose 5 of the following)</b>			
CS 170 Game Mathematics I	_____	5	_____
CS 172 Game Mathematics II	_____	5	_____
CS 210 Game Physics	_____	5	_____
CS 273 3D Game Dev III DirectX	_____	5	_____
CS 274 3D Game Dev IV Direct X	_____	5	_____
CS 283 AI for Game Developers	_____	5	_____
Total		63	

\_\_\_\_\_  
Adviser's Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Dean's Signature

\_\_\_\_\_  
Date