

**Computer Science Major (Option 4 Game Development), B.S. Degree (43-04281)**

This guide is valid for the 2013 Undergraduate Catalog only and is subject to change. This guide is a recommendation only and your actual program may vary. The time it takes to complete a degree and the sequence in which courses are taken will depend on any credits transferred to UCM and on placement in math, reading, and writing. See the current Undergraduate Catalog ([ucmo.edu/academics/catalogs](http://ucmo.edu/academics/catalogs)) for a complete listing of academic policies, curriculum, prerequisites, and course descriptions.

<b>Freshman Year - Fall Semester</b>	<b>Hrs.</b>	<b>Freshman Year - Spring Semester</b>	<b>Hrs.</b>
CS 1100 Computer Programming I	3	CS 1110 Computer Programming II	3
ENGL 1020 Composition I	3	ENGL 1030 Composition II	3
General Education	9	Option 4 Major Elective**	3
<b>Semester Total</b>	<b>15</b>	General Education	6
AE 1400 Freshman Seminar*	1	<b>Semester Total</b>	<b>15</b>

<b>Sophomore Year - Fall Semester</b>	<b>Hrs.</b>	<b>Sophomore Year - Spring Semester</b>	<b>Hrs.</b>
CS 2300 Data Structures***	3	CS 2200 Introduction to Computer Organization***	3
CS 2500 C and UNIX Systems Programming**	3	CS 2400 Discrete Structures***	3
MATH 1131 Applied Calculus or MATH 1151 Calculus & Analytic Geometry I	3-5	Option 4 Major Elective**	3
General Education	6	General Education	6
<b>Semester Total</b>	<b>15-17</b>	<b>Semester Total</b>	<b>15</b>

<b>Junior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Junior Year - Spring Semester</b>	<b>Hrs.</b>
CS 2810 Introduction to Game Design	3	CS 3100 Programming Languages***	3
CS 3200 Computer Architecture***	3	CS 4110 Mobile Applications Programming with Android	3
CS 4300 Algorithm Design & Analysis***	3	CS 4500 Operating Systems***	3
Option 4 Major Elective**	3	Option 4 Major Elective**	3
General Education	3	General Education	3
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>15</b>

<b>Senior Year - Fall Semester</b>	<b>Hrs.</b>	<b>Senior Year - Spring Semester</b>	<b>Hrs.</b>
CS 4600 Database Theory & Applications***	3	CS 4830 Game Development	3
MATH 1300 Basic Statistics or MATH 3311 Introduction to Mathematical Statistics***	3	CS 4910 Software Engineering***	3
Option 4 Major Elective**	3	Option 4 Major Elective**	3
General Education	6	Free Choice Electives#	4-6
<b>Semester Total</b>	<b>15</b>	<b>Semester Total</b>	<b>13-15</b>

**Computer Science Major (Option 4 Game Development), B.S. Degree - 120 hours**

- \*AE 1400 is a free choice elective and is highly recommended for academic success. If AE 1400 is chosen, 1 less hour of free choice electives will be needed.
- \*\*Option 4 requires 18 hours of major electives. See the 2013 Undergraduate Catalog for the list of appropriate course choices.
- \*\*\*This class is only offered during the semester indicated.
- #The number of free choice electives will depend on the calculus selection made.
- To satisfy the General Education Assessment Policy students must take the GEA exam before or during the semester in which a total of 45 credit hours will be earned. The minimum score of 425 must be achieved by the semester in which 75 credit hours will be earned. Go to UCM Testing Services (HUM 216, 660-543-4919) in MyCentral for more information.