

FIRST YEAR STUDENT INFORMATION
COMPUTER SCIENCE: COMPUTER GAME DESIGN MAJOR
2009-2010

The goal of this degree is to provide students a deep understanding of the technical aspects of computer game engineering, and a broad background in the artistic, narrative, and dramatic elements of game design. To learn more about the Computer Science: Computer Game Design Major go to: <http://www.cs.ucsc.edu/game-design>

NEW STUDENT ORIENTATION

Students begin college with a wide variety of backgrounds and levels in science and math. During this orientation, you will be able to take placement exams, receive help on choosing classes, and learn to access the many services and resources available. This is an opportunity to meet with faculty and staff that will assist you with your academic goals. Please go to <http://admissions.ucsc.edu/orientation09/> to get more information.

**If you are unable to attend summer orientation make sure to come to
Fall Orientation: September 22, 2009 from 10:30am - 12:30pm, 101 Engineering Lecture**

ENROLLMENT FOR FALL QUARTER

Computer Science: Computer Game Design has many course requirements that must be taken sequentially. Whether you are an admitted or a proposed Computer Game Design major, we strongly recommend you begin the major fall quarter of your first year. Here are some suggestions:

(Strongly recommended that you take all major requirements for letter grades)

First-year students are required to take the appropriate college core course fall quarter:

5 units College Core Course

Due to math course sequence requirements, it's recommended that you begin them fall quarter:

5 units Mathematics – MATH 19A, Calculus, or AMS 3, Pre-calculus for Science & Engineering

For your third class, begin the programming sequence or complete the physics requirement:

7 units Computer Science – CMPS 12A and CMPS 12L, Intro to Programming & Lab (accelerated)
(Prerequisite for CMPS 12A is math placement into Math 19A. Prior programming experience is highly recommended)

OR

5 units Physics 6A/L, Introductory Physics I & Lab
(Co-requisite is Math 19A. If taking AMS 3: instead of Physics 6A, take CMPS 5P, Introduction to Programming in Python or a general education course)

Please note: If you do not have prior programming experience and you placed into Math 19A, take Physics 6A/L in fall quarter, and then take CMPS 5J, Introduction to Programming in Java in winter, and CMPS 11, Intermediate Programming in spring.

Students with little or no prior programming experience are strongly recommended to take CMPS 5J, Introduction to Programming in Java in their second quarter. This course is the first in a two-course introductory programming sequence; the second course is CMPS 11, Intermediate Programming, offered in Spring. If you have had some programming experience (e.g. high school AP computer science) and are eligible to enroll in Math 19A, then you can consider taking CMPS 12A/L instead of CMPS 5J and CMPS 11. *Please note:* math placement into Math 19A is a prerequisite to CMPS 12A. Please see the next page for information on placement exams.

MATH PLACEMENT EXAM

You will need to take the math placement exam unless you have been awarded advance placement credit. The purpose of this exam is to establish at what class level you should begin in this subject. You will need to take this exam before you can enroll in MATH 19A, AMS 3, or CMPS 12A. **Do not enroll in MATH 11A - take AMS 3 if you do not place into MATH 19A.** See <http://www.math.ucsc.edu/placement/index.html> for a study guide and information on dates, times and locations for the exams.

ADVANCED PLACEMENT & INTERNATIONAL BACCALAUREATE EXAMS

Transfer units are gained at the University in accordance with scores earned on College Board Advanced Placement (AP) and for International Baccalaureate Higher Level (IBH) exams. However, not all exam scores qualify for credit toward Computer Game Design major requirements, even if university units have been granted. In addition, students are strongly advised to take course CMPS 12B, Introduction to Data Structures, even if they are eligible to receive credit for this course due to AP or IBH tests. In order to obtain "course credit", you must provide appropriate "score" verification to the School of Engineering Undergraduate Student Affairs Office. The following AP and IBH scores are accepted for course credit in lieu of SoE major requirements:

Advanced Placement & International Baccalaureate Exams	SCORE	UCSC COURSE CREDIT
AP Computer Science Exam A	3	CMPS 5J
AP Computer Science Exam A	4 or 5	CMPS 12A, Introduction to Programming**
AP Computer Science Exam AB	4 or 5	CMPS 12A, Introduction to Programming & CMPS 12B, Introduction to Data Structures**
IBH Computer Science	5	CMPS 12A, Introduction to Programming**
IBH Computer Science	6 or 7	CMPS 12A, Introduction to Programming & CMPS 12B, Introduction to Data Structures**
AP Mathematics Calculus Exam AB	3	AMS 3 or MATH 3
AP Mathematics Calculus Exam AB	4 or 5	MATH 19A, Calculus
AP Mathematics Calculus Exam BC	3	Enrollment in MATH 19A is recommended
AP Mathematics Calculus Exam BC	4 or 5	MATH 19A & 19B, Calculus
AP Chemistry Exam	5	CHEM 1A, General Chemistry

**Includes credit for associated labs

SAMPLE PLANS

These sample plans are intended to help students plan their first two years by providing a framework that you can adapt to your own interest and special needs.

To view the entire curriculum for this major go to: <http://www.soe.ucsc.edu/sites/default/files/cmpgbs0809.pdf>

COMPUTER SCIENCE: COMPUTER GAME DESIGN Prior Programming Experience

	FALL	WINTER	SPRING
Year 1	CMPS 12A/L MATH 19A Core Course	CMPS 12B/M MATH 19B CMPS 80K	CMPE 16 MATH 21 or AMS 10 Gen Ed
Year 2	PHYS 6A/L CMPE 12/L Art/Social Elective	CMPS 109 CMPS 20 Gen Ed	CMPS 101 Art/Social Elective Gen Ed

COMPUTER SCIENCE: COMPUTER GAME DESIGN Limited or No Prior Programming Experience

	FALL	WINTER	SPRING
Year 1	PHYS 6A/L or PHYS 5A/L MATH 19A Core Course	CMPS 5J MATH 19B CMPS 80K	CMPS 11 MATH 21 or AMS 10 Gen Ed
Year 2	CMPE 16 CMPS 12B/M Art/Social Elective	CMPE 12/L CMPS 20 Gen Ed	CMPS 101 Art/Social Elective Gen Ed

SoE Undergraduate Affairs Office
225 Baskin Engineering Building
Open M-F 9-11am & 1:30-3:30pm
Express Drop-in advising hours: M-F 1:30 - 3:30pm
(831) 459-5840 advising@soe.ucsc.edu
www.soe.ucsc.edu/advising/undergraduate

