

BACHELOR OF SCIENCE IN COMPUTATIONAL MEDIA

The Bachelor of Science in Computational Media is a collaborative effort by the College of Computing, the School of Literature, Media, and Communication (LMC), and the School of Music. The program offers a thorough education in all aspects of the computer as a medium: the technical, the historical-critical, and the applied. Program graduates will have both significant hands-on and theoretical knowledge of computing and an understanding of visual design and the history of media. Graduates will be uniquely positioned to plan, create, and critique new digital media forms for entertainment, education, and business communication.

The program requires 36 credit hours of courses in computer science and 30 credit hours of courses in Music Technology or LMC (in addition to the humanities requirement). A substantial number of required courses in each unit ensures that every student has basic competence in:

- computational principles;
- the representation and manipulation of digital media, including graphics and sound;
- software design;
- visual and interactive design;
- digital arts; and
- media theory and history.

After completing required courses, students specialize in a specific area of media computing. Typical specialty areas include:

- Interactive games design: This is one of the fastest growing areas of digital media production and is already a \$7 billion industry.
- Special effects: As special effects become more complex and focused on computer-generated imagery, employment in this area will increasingly require expertise in both media and computer science.
- Culturally informed program design: As programming work is increasingly outsourced to nations offering lower labor costs, programming that adds value through a sophisticated response to the needs of specific corporate and group cultures will offer job security to American programmers.

Depending on their coursework within the BS program, students will also be qualified to enter graduate studies in computer science, digital arts, digital media studies, and human-computer interface.

- Bachelor of Science in Computational Media - Intelligence - Film & Media Studies
- Bachelor of Science in Computational Media - Intelligence - Games
- Bachelor of Science in Computational Media - Intelligence - Interaction Design
- Bachelor of Science in Computational Media - Media - Film & Media Studies
- Bachelor of Science in Computational Media - Media - Games
- Bachelor of Science in Computational Media - Media - Interaction Design
- Bachelor of Science in Computational Media - Music Technology - Intelligence
- Bachelor of Science in Computational Media - Music Technology - Media

- Bachelor of Science in Computational Media - Music Technology - People
- Bachelor of Science in Computational Media - People - Film & Media Studies
- Bachelor of Science in Computational Media - People - Games
- Bachelor of Science in Computational Media - People - Interaction Design