Once dismissed as the pastime of geeks hunkered down in their dorm rooms, gaming has evolved into such a strong cultural and economic force in the United States that one school believes it's worthy of academic study.

The University of Southern California is planning to offer a minor degree in the topic in the fall of 2004, and it is believed to be the first major research university to do so.

The minor is in the final stages of approval by the curriculum committee. The program will be introduced to students and the general public at a kickoff event on Nov. 20.

"Creating compelling games involves more than just developing a shoot-'em-up," said professor Anthony Borquez, director of the Information Technology Program at the USC School of Engineering. "Consumers are demanding the type of games that require game developers to be more creative. They need to be broader thinkers."

The USC School of Fine Arts, School of Cinema-Television and Computer Science department are collaborating with Borquez on the proposed interdisciplinary gaming minor. Instructors from the game industry are also lending their talents.

Course work for the minor will include 3-D modeling, animation, programming, mobile game development and game production. Students will have to take between six and eight courses to earn the minor degree, and choose one of three areas to focus on: art and animation, design and management, or programming.

The school has two lab facilities equipped with the latest hardware, video cards...
and a library of video games. Each of the 50 PC workstations has Xbox, PlayStation 2 and GameCube consoles attached.

"Students will come away with the hands-on animation and modeling skills necessary to get a job in the industry," said Scott Easley, a lead animator at Electronic Arts and currently a video-game art and animation instructor at USC. "We teach exactly what you need to learn."

Borquez offered the first course in video-game production last spring. It was a last-minute decision and didn't even make it into the course catalog. Once students found out about the class through word of mouth, however, the response was overwhelming.

"In a week, we had 85 students plus a waiting list," Borquez said. "We were only expecting 20 or 25."

Video games have received more attention over the past several years as their revenue has grown faster than any other form of digital entertainment. Gross revenue from video-game hardware and software sales has surpassed revenues from movie ticket sales, video rentals and concert tickets, according to Mike Goodman, senior analyst with the Yankee Group.

Earlier attempts at developing a gaming program at USC didn't pan out. Borquez suggested the idea about five years ago, but was met with a lukewarm response from both the administration and students.

"It was still viewed as a recreational kind of discipline," Borquez said. "I knew the complexity involved on the programming side as well as the creative side."

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Robert Nideffer, a studio art professor at the University of California, Irvine, also attempted to establish a gaming minor in 2001 but the controversial plan was rejected.

Nideffer said he's seen progress, however. Over the summer, the school earned approval for a game culture and technology lab, a research and development facility that is part of the Cal-(IT)$^2$ project, a statewide science and innovation initiative spearheaded by Gov. Gray Davis.

"This was a significant development," Nideffer said. Now, "because we've got this lab in place, and some time has passed and other institutions are looking at games as a legitimate thing to study.... We're in a stronger position to be successful this time around."

He said he's working on resubmitting the gaming minor proposal to UCI, and was excited to hear about USC's plans.

"I think it's great -- the more, the merrier," Nideffer said. "Every institution has its unique flavor, and ultimately it's the people in the program that give it its character."

Previously, gaming programs were limited to more-specialized schools such as DigiPen in the Seattle area and art schools like the Art Institute of California in San Francisco, which offers a degree in game art and design. NYU and the University of Washington have certificate programs in video games, and others, like MIT, wrap gaming into media studies programs.

Carnegie Mellon is the only school to offer a Masters degree in entertainment technology. The Entertainment Technology Center is a joint effort between the
College of Fine Arts and the School of Computer Science.

One USC student said the gaming program will help guide him to a career in the game industry.

"Most of the classes that I'm taking right now are taught by people actually in the industry," said Hans Vancol, a sophomore majoring in computer science and engineering. "They give us a lot of insight on what we should and should not do, and what to expect."

Vancol said he plans to pursue the gaming minor next year, and will likely choose the art and animation track.

The program "has a lot of potential, and I can just see it growing a lot more," he said. "It will probably draw more people to the school as well."