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The Future in Focus

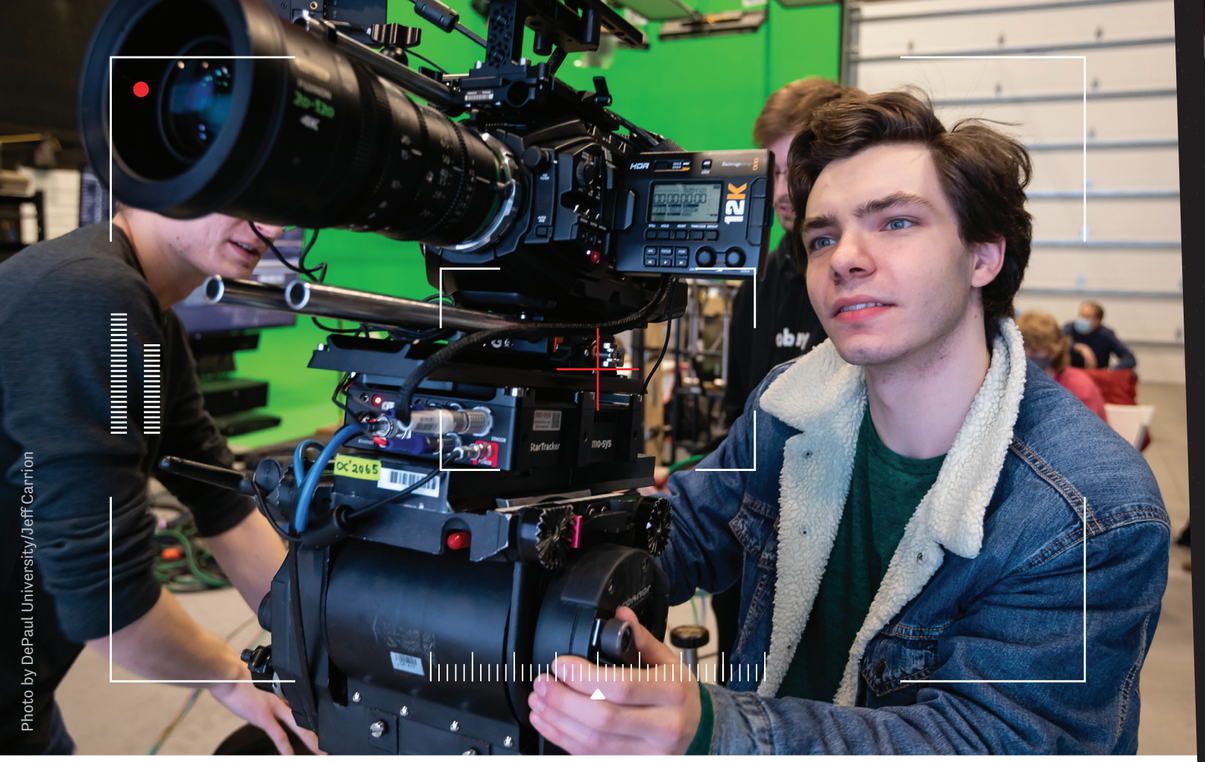


Photo by DePaul University/Jeff Carrion

The Future in Focus

FILM AND TV STUDENTS PUT SPECIAL EFFECTS INTO ACTION WITH VIRTUAL PRODUCTION

BY KRISTIN CLAES MATHEWS

Inspired by technologically pioneering productions such as "The Mandalorian" and "Avatar: The Way of Water," DePaul University students are putting the future of film and TV into action.

Virtual production, a cutting-edge approach to special effects, is one of many reasons cinema students are flocking to DePaul. Using the same equipment as professional studios, DePaul students are filming live actors in sync with LED screens, all powered by a game engine.

DePaul recently expanded its footprint at Cinespace Studios on Chicago's West Side to accommodate record enrollment in the School of Cinematic Arts.

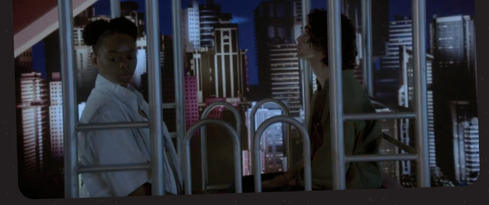
"I came to DePaul for the virtual production," says Sophia Lindsey, an undergraduate in the BFA in Film and Television program. "No other school had what I was looking for."

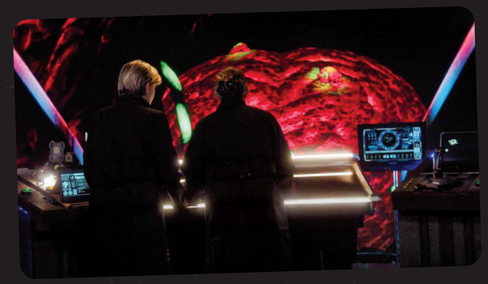
SPECIAL EFFECTS IN ACTION

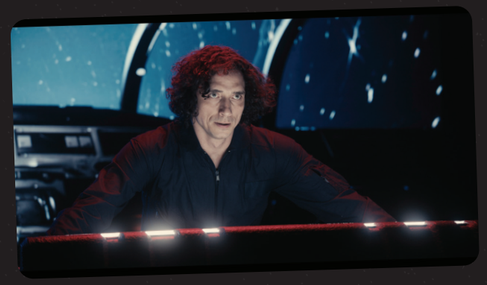
Virtual production is an emerging filmmaking method that uses video game tools and large-format LED screens for live, in-camera visual effects. Filming a scene requires a large, interdisciplinary cast and crew. Actors perform in front of an LED wall made from dozens of individual video screens. A tracking system on the camera uses sensors to orient the camera's position in 3D space in real time. This camera data feeds into a computer network, where an operator uses Unreal, a 3D computer-graphics video game engine, to integrate it with the environment displayed on the LED wall. This system allows the actors, director and crew to see and work in the virtual environment collaboratively in real life.

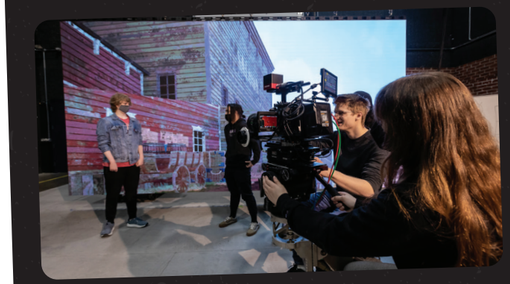
Recently, acting students from The Theatre School joined classmates studying directing, animation, game design and more at the Jarvis College of Computing and Digital Media. They filmed live scenes, written and designed by students, set on an amusement park ride, a spacecraft and a mine shaft elevator.

"Our students are taking creative risks that a lot of big production companies aren't doing," says Brian Andrews, associate professor and chair of post-production. "A lot of our experience so far has been more technical and trying what's out there. But once we got this up, and started seeing the spirit of play that students have, I think we're at a phase where really interesting, creative storytelling ideas are going to be enacted here in virtual production."



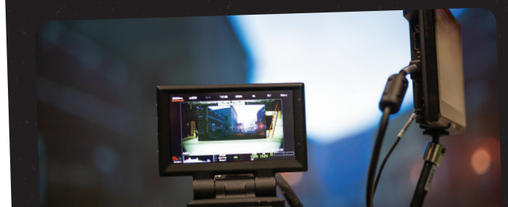






"OUR STUDENTS ARE TAKING CREATIVE RISKS THAT A LOT OF BIG PRODUCTION COMPANIES AREN'T DOING."

—BRIAN ANDREWS, ASSOCIATE PROFESSOR



Andrews says virtual production is used to spectacular effect on many films, from "Poor Things," which recently won four Academy Awards, to "Guardians of the Galaxy."

"'Poor Things' has this beautiful visual aesthetic that's loose and painterly. The sequence on the boat with fantastically designed skies and ocean scenes – all of that was done with virtual production," Andrews says.

Students say experience with virtual production is preparing them for jobs in the industry.

"Taking virtual production at DePaul heavily influenced my career path," says **Julian Nisenboim (CDM '22)**, an alumnus of the BFA in Film and Television program. He landed a job as a video editor and pitched virtual production to the CEO at Impact Networking, a national business management consultancy that includes digital innovation among its services. Now he is supervising the company's virtual production efforts. "One of the things that was very attractive about DePaul was having access to facilities like Cinespace and being able to have hands-on technical training while also being encouraged to be creative," Nisenboim says.

DePaul's School of Cinematic Arts was among the first in the Midwest to teach and use virtual production. This fall, DePaul is on track to offer minors in virtual production stage operation and virtual production environment design.

"Stage operations are for our hands-on filmmakers, including cinematographers and camera people," Andrews says. "The environment design side will prepare students to create the 3D environments that take place in the game engine."

Andres Fiz, an undergraduate student studying projection design, appreciates the interdisciplinary collaboration involving the same technology used by pros.

"I was able to work with the Unreal designer from the beginning of the process, which is unusual in professional and virtual production," Fiz says. "I thought that was really wonderful."

Scott Miller, CEO of a Chicago-based video production agency, adds that his company isn't alone in eyeing the program's graduates as ideal recruits.

"I'd hire them in a minute," Miller says. "This is going to be part of every production or production company's tool set, and you don't want to have to learn it once you're out of school. You want to learn it now because people like myself are looking for those individuals coming out of school who have this background and experience. It's invaluable."

GROWING MAJORS AND STUDIO SPACE

DePaul recently expanded its footprint at Cinespace and welcomed its largest class yet of film and TV students this past academic year. There are more than 1,500 students currently majoring in film and television at DePaul, a 38% increase since 2019. Total enrollment in the School of Cinematic Arts tops 1,900, including students majoring in animation, screenwriting, creative producing and documentary filmmaking.

Late last year, DePaul Cinespace added two additional sound stages for a total of six, which include professional-grade sets, lighting and design. In total, the university now has nearly 60,000 square feet of space on the studio lot. Film and TV production have revved back up in Chicago, and students learn on the larger studio lot where hits "The Bear" and "Chicago PD" are filmed.

A new short documentary on the program – available to view at *magazine.depaul.edu* – features students, faculty and industry professionals discussing the value of DePaul's virtual production courses. Faculty members Dana Kupper and Susanne Suffredin co-directed the film. Andrews hopes it will spark interest from production companies and partners to join DePaul in expanding the program.

"Virtual production can put any person in any place. From a sports broadcast to a CEO speaking with investors, there are possibilities for this technology across many industries," Andrews says. Some alumni may make the next "Mandalorian," but the program's greatest strength is its intrinsic interdisciplinarity and potential for pipelines to numerous industries.

"This endeavor would not have been possible without all of these different people coming together and collaborating and bringing these technologies together," Andrews says. "We are lucky that we have all of those things here, moving this project forward to being really the vision of the go-to school for virtual production in the Midwest, if not nationwide."