



# Bringing top technology into the classroom.

Rochester Institute of Technology challenges students' creativity with rapid modeling through Adobe XD.

## RIT | College of Art and Design

*"Adobe XD CC strikes a great balance between production efficiency and creative freedom."*

*Adam Smith, Undergraduate Program Director, New Media Design, RIT's College of Art and Design*

### SOLUTION

Adobe Creative Cloud for enterprise, including Adobe XD CC

### RESULTS



Empowers students to **PUSH BOUNDARIES** of creativity with fast modeling and iterations



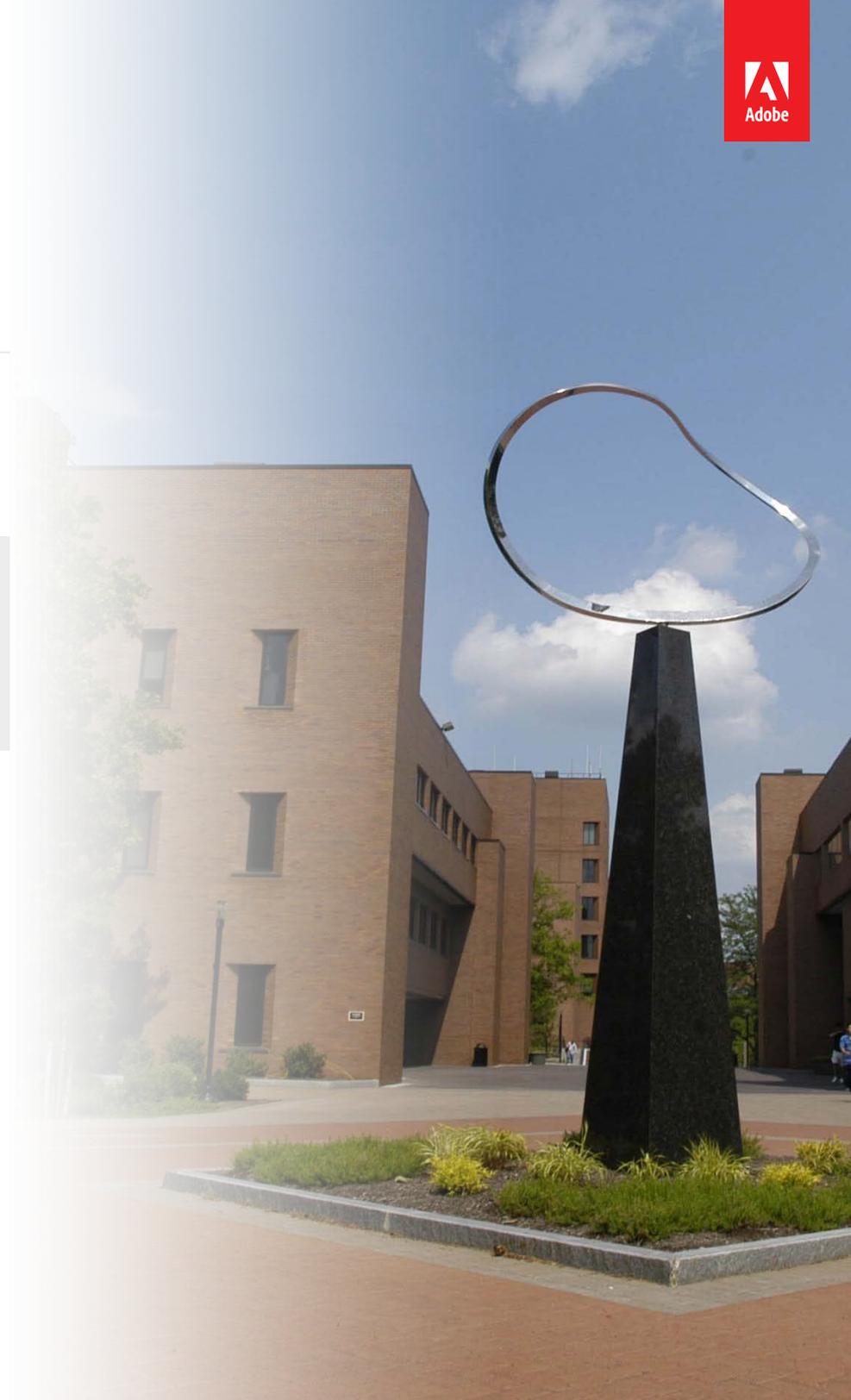
Collaborates in **MULTIDISCIPLINARY TEAMS** by providing a common language for engineers and designers



Uses smooth workflows that integrate multiple Adobe Creative Cloud apps for **DYNAMIC RESULTS**



Allows designers to concentrate on **SOLVING PROBLEMS** by reducing technical hurdles



## Rochester Institute of Technology

Established in 1829

Students: 19,000

Rochester, New York

[www.rit.edu](http://www.rit.edu)

### CHALLENGES

- Bring technology into the classroom to give students hands-on experience
- Encourage students to think deeper about design and experiment creatively
- Empower students to create innovative solutions for a wide variety of industries, from gaming to healthcare

“Working with Adobe XD CC to prototype the interface was fantastic. Students could create a model and adjust screens based on feedback very quickly.”

*Andrew Phelps, Professor, RIT's College of Art and Design*

### Teaching through doing

Today's world demands more from students than just a solid academic foundation. To succeed in the workplace, students must be prepared to take on real challenges outside of the classroom and collaborate with colleagues in any field.

For nearly 200 years, Rochester Institute of Technology (RIT) has prepared students for successful careers through career-focused programs and cooperative education opportunities that encourage students to take on paid work experiences. By introducing students to real-world challenges, RIT sets students on the path to a bright and fulfilling future.

“As part of our focus on career-oriented education, RIT takes a very hands-on approach to technology in the classroom,” says Andrew Phelps, Professor in RIT's College of Art and Design. “Our goal is to put the latest technologies in students' hands and have them learn by doing. That's why we use Adobe Creative Cloud apps in the classroom. Adobe Creative Cloud is used in businesses around the world, from global corporations to small startups. By teaching students to use Adobe creative apps effectively to communicate designs and ideas with others, we're setting students up for successful careers.”

### From classroom to studio

Phelps is a strong believer in the educational theory of constructionism—in other words, that students learn best by doing. In his game production class, Phelps turned his classroom into a game production studio working on the game “Fragile Equilibrium.” Students from a variety of backgrounds worked in teams on engineering, gameplay design, art production, user interface design, and sound. Phelps even hired students to act as production managers and team leads for the project.

“By running the course like a professional studio, we not only helped students get hands-on experience in game development, but we taught them how to use industry-standard tracking tools, work with cross-disciplinary teams, and practice professional skills in communication and conflict resolution,” says Phelps.

While setting up his game production course, Phelps began hearing talk about one particular app in Adobe Creative Cloud for enterprise: Adobe XD CC. Several professors were finding classroom success using Adobe XD to prototype user experiences for mobile apps and web design. Phelps challenged students to use Adobe XD to model startup screen progression, menu flows, and in-game interfaces before working on art models or programming the interfaces in Unity.



RIT students Aditi Khazanchi and Haley King created *Wave* for an Interactive IV class project, using augmented reality to help visitors find their way around a hospital.

“Adobe XD CC has easy, intuitive features that helps students jump in and immediately start working on a mobile design.”

*Miguel Cardona, Assistant Professor, New Media Design, RIT's College of Art and Design*

“Working with Adobe XD CC to prototype the interface was fantastic,” says Phelps. “Students created a model and adjusted screens based on feedback very quickly. We immediately dove into discussions about button placement, navigation pathways, and information that users will need. It was so much faster than waiting for engineering to build an interface that they would need to rip apart and rebuild over and over again.”

Adobe XD not only sped up workflows, but it provided a great advantage when it came to communicating between teams. Rather than design teams simply describing interfaces to engineering, they provided clear diagrams that visualized the screen positioning and menu flow. There was less confusion, which reduced the time that engineers needed to spend on meeting with designers and rebuilding interfaces. Teams could focus on polishing game assets or improving mechanics.

The resulting game is a triumph of art and gameplay. “Fragile Equilibrium” is available through the Xbox One Creators Program, Steam Store, Windows Store, and Itch.io platform.

## Encouraging greater productivity and creativity

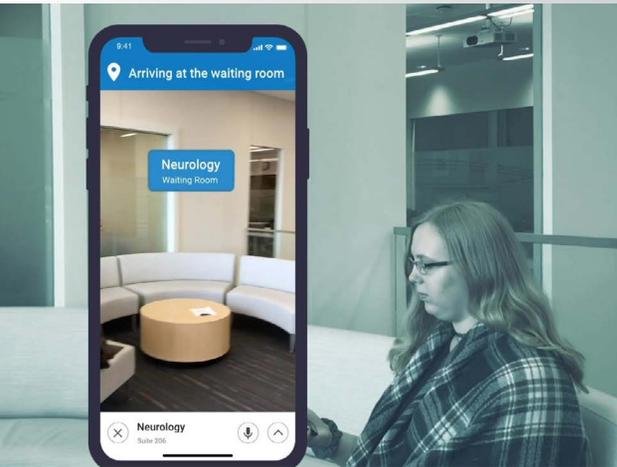
RIT students in the New Media Design program focus on some of the most cutting-edge media opportunities, including interactive installations, virtual reality experiences, and augmented reality apps. These immersive digital environments have the potential to revolutionize any number of industries, from education and healthcare to business and manufacturing.

New Media Design students start using Adobe Creative Cloud their first day in the program. After mastering the basics of design with Adobe Photoshop CC and Adobe Illustrator CC, students typically add animation and movement to their repertoire with Adobe After Effects CC and Adobe Premiere Pro CC.

“One thing that we've struggled with in the New Media Design department is how to balance teaching production versus creation,” says Adam Smith, Undergraduate Program Director of New Media Design in RIT's College of Art and Design. “We want students to gain experience on efficient workflows and important production tools, but we still want every classroom lesson to challenge them creatively so that they will become better designers. Adobe XD CC strikes a great balance between production efficiency and creative freedom.”

Adobe XD is easy for students to pick up, allowing them to rapidly prototype interactive designs and interfaces, even switching between responsive screen sizes. Because students are working quickly, they have more time to test variations and look at more creative ways to communicate information through their apps, designs, or projects.

Professors also gain more opportunities to work closely with students. Students can quickly create new iterations of a project based on feedback and fit in more review cycles during a course. With more opportunities for feedback, students can grow further and push themselves creatively.



RIT students Aditi Khazanchi and Haley King Interactive IV class project *Wave*.

## SOLUTION AT A GLANCE

Adobe Creative Cloud for enterprise, including:

Apps: Adobe XD CC, Adobe Photoshop CC, Adobe Illustrator CC, Adobe After Effects CC, Adobe Premiere Pro CC

### For more information

[www.adobe.com/education.html](http://www.adobe.com/education.html)

[www.adobe.com/creativecloud.html](http://www.adobe.com/creativecloud.html)

[www.adobe.com/products/xd.html](http://www.adobe.com/products/xd.html)



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## Futuristic wayfinding in hospitals

Miguel Cardona, Assistant Professor for New Media Design in RIT's College of Art and Design, explores digital product design and interactive media of the future in his class. The class partnered with Rochester Regional Health to give students a real-life challenge. Students were asked to think about the future of augmented reality and create a mockup of an app that might use augmented reality to help visitors find their way around a hospital setting.

Students brainstormed potential goals of different types of hospital visitors. They interviewed stakeholders to get an idea of the types of questions visitors might have, and even visited hospitals to get a first-hand idea of what visitors might find confusing. Students used Adobe XD for wireframing and prototyping their designs.

"Adobe XD CC has easy, intuitive features that helps students jump in and immediately start working on a mobile design," says Cardona. "Students can skip past all of the complicated, technical work needed to set up a responsive layout and just start focusing on how to solve the users' problems in creative and helpful ways."

Cardona found the collaborative workflows between Adobe XD and other Adobe Creative Cloud apps to be particularly powerful. When Cardona first decided to start working with Adobe XD, students had already started prototyping their projects in Photoshop or Illustrator. Students could easily pull that initial work directly into Adobe XD and start polishing their augmented reality interfaces.

To add a more realistic understanding of what the augmented reality wayfinding apps might look like, students then exported their Adobe XD interfaces into After Effects and combined them with actual video footage from Rochester Regional Health hospitals. This allowed students to demonstrate how the interface and 3D space would interact in a final project.

"With Adobe Creative Cloud apps working together, we're encouraging students to move past traditional interfaces and look at new and unique ways of how they can design for the future," says Cardona.