



KEY INFORMATION

Customer: Breda University of Applied Sciences
Location: Breda, Netherlands
GAMEducation - #3 best video game school worldwide (2023)
Keuzegids - Top rated programme (2023)
The Rookies - #8 Best Game Design & Development Schools in the World (2022)



Jeremiah van Oosten
Programming Educational
Manager



Zoran Arizanovic
Visual Arts Educational
Manager

UNLEASHING THE NEXT AAA GAMES



Breda University of Applied Sciences (BUAS), located in city of Breda in the Netherlands, has emerged as a leading institution empowering aspiring game developers and designers to transform their passion for gaming into successful careers. BUAS offers a range of courses specifically tailored to meet the demands of the gaming industry, and with a commitment to providing hands-on experience, has become a hub for aspiring game developers from all over the world.

Recognizing that successful games require a blend of technical expertise, artistic vision, and effective storytelling, the university offers a diverse range of courses around game creation. From programming and game design to game art and production, students have the opportunity to specialize in their area of interest while

gaining a broad understanding of the entire game development process. BUAS focuses on facilitating students to become self-driven learners who are able to analyze a problem and use all the resources around them to find solutions to shape the future of gaming.



THE CHALLENGE

The gaming industry has experienced a surge in popularity and profitability in recent years. As technology advances and gaming platforms diversify, the industry continues to captivate millions of players worldwide. Jeremiah van Oosten, Programming Educational Manager at Breda University of Applied Sciences, says that gamers are really pushing the boundaries of what is possible in games. "They want more pixels, higher refresh rates, more colors and darker darks and whiter whites. So we really need to have the



highest technology available to the students in order for them to test their games and to make sure that their game is going to run as well as it can," says van Oosten. This is why the school needs to ensure they are staying innovative with the equipment they are providing for their future talent.



their games, and for that, they need a high-end workstation. The workstation has cut down students' rendering time by one-tenth, meaning that now students can run their games at the highest quality and resolutions, allowing them to truly benchmark their games.

The school has also put together the ROG gaming keyboard and mouse to give students the most engaging experience while they're testing their games.

Creating visual assets

Game development is a very technical process. The school uses the ASUS ProArt Display PA32UCR-K when creating game art, as having a 4K HDR monitor with 1000nits of brightness enhances artist's workflow and communication across the team in terms of color accuracy. Zoran Arizanovic, one of the teachers in Visual Arts at the Games Department, points out "Traditionally for digital artist, Adobe RGB color space is the main working environment and with this monitor we can reach 99.5% accuracy, which is perfect for us."

Reviewing games on a large canvas

Collaborative work is an essential part of BUAS games courses. The school uses the ASUS ProArt Projector A1 when presenting its games to a larger audience to view the quality of the product. This Calman-verified projector comes with 98% Rec. 709 color space, which gives the audience and lecturers the ability to truly see the students' games accurately in the highest color representation.

THE SOLUTION

Running games in Unreal Engine

In its game labs, BUAS uses the ASUS ProArt Display PA348CGV to test its games. Working in Unreal Engine, it is very important to have a fast and responsive monitor. With a 120Hz refresh rate, the students can profile their games and ensure they will run at the best quality on the end user's computer. The monitor comes with 98% color space coverage of the DCI-P3 and 400nits of brightness, which means students can test the peak brightness in areas that matter the most.

Rembrandt van Leeuwen, Visual Arts student at Breda University, says he has noticed an improvement in his workflows after using the ASUS ProArt equipment. "I work with characters a lot and I feel that with this screen, with this wide size and high resolution and beautiful colors, I can actually make great concept art for my study."

BUAS has paired the ProArt displays together with the ALTERNATE workstation powered by the ASUS ProArt Z790 motherboard. Within its degree program, students often need to make game trailers for

THE OUTCOME

After installing the ASUS ProArt equipment, the games department is now able to have a full workflow with industry leading color accuracy and computing power starting from Visual Arts all the way to developing their games.

"The ASUS ProArt equipment will really allow our students to achieve the greatest quality in their games for the future of gaming," concludes van Oosten.

PRODUCT INSTALLED



ProArt Display PA32UCR-K

32" 4K HDR, HDR-10, HLG, 1000 nits, Delta E<1 color accuracy



ProArt Display PA348CGV

34" ultra-wide QHD, 120Hz, 98% DCI-P3



ALTERNATE workstation powered by ProArt Z790-Creator WIFI

2 x Thunderbolt™ 4, 10 Gb and 2.5 Gb Ethernet, WiFi 6E



ProArt Projector A1

Full HD, 3000 lumens, Calman Verified color accuracy



Powered by ASUS



Case Study Video