

Staffordshire University

Designing a custom broadcast space for the UK's first eSports course



When the Staffordshire University Business School decided to launch a new events management course focused on eSports, they asked the broadcast department for advice on developing a custom eSports lab. Having worked on the university's custom newsroom and gallery setups in the past, we were brought in to help them get up to speed with video over IP and 4K streaming...

"We're the first university to have our own bespoke broadcast facility based around eSports," said Christopher Leese, the university's Broadcast Technical Instructor. "When I got involved, the course and facility had already been approved by the executive here at the university, but the staff at the business school wanted our help to spec it up. We did as much research as we could individually, and then we spoke to Jigsaw24 to embellish our ideas and bring the design to a point where it was going to work for everyone involved."

In a nutshell...

Who are they?

Staffordshire University are the UK's number one university for games design and development. As a long-term supplier of the university's broadcast department, we were the first choice of IT partner when they decided to develop an eSports event space.

What did they need?

A facility that would let them share streams from 12 competing players, plus a studio space for commentators and interviews.

How did we help?

We help the university specify, design and install a future-proof setup that has plenty of room for expansion and will support 4K streaming as it becomes more widespread.

What are the benefits?

- The facility makes it far easier to engage potential students and sell the new course it's attached to.
- Students have access to cutting-edge technology that is currently being used in their target industry.
- The system uses a cost-effective, easily expandable video over IP system, meaning the space can stay current for longer.
- The broadcast setup can be expanded as the course grows or if new courses are added.

A futureproof IP workflow

As eSports is a fast-growing industry, the university needed a lab that could be expanded quickly to support more students, players and pixels, as the course grew and the online streaming world moved towards 4K.



"The eSports lab needed to be able to create a live programme using in excess of 22 4K feeds from day one, and with eSports being so popular at the moment, they wanted plenty of scope for expansion," explained Jigsaw24's senior consultant and video over IP specialist, Anthony Corcoran. "The feeds were full bandwidth, low latency, coming from completely different types of sources, (including the high frame rate, high res screens from gaming PCs, PTZ cameras, broadcast cameras and other software on the network), and from completely different manufacturers. In short, the solution had to be high quality, quick, and flexible, which meant it had NDI written all over it."



At the heart of their setup is the NewTek VMC1 video mixing engine, a 44-input IP switcher that integrates seamlessly with NewTek's vast range of production software. The lab's inputs currently include 12 gaming PCs in a six vs six configuration, three 4K-ready camcorders, and a ceiling-mounted PTZ camera to capture footage of the entire space. They can also mix in captions, live text and other graphics, and still have plenty of room to expand in the future – all using the familiar NewTek controls that they've already implemented in other departments.

"We could have gone with the smaller TC1," said Christopher, "but we knew we'd immediately be putting a cap on ourselves and what we could have coming in, whereas the VMC1 always has room for expansion. It's exciting to have a flagship product that we can show to the students."

Despite the fact that the VMC1 is far from a basic product, the university found setup relatively easy. "Networking isn't something I've had a lot of experience with in the past," admitted Christopher. "It was quite a daunting prospect, but having ongoing support from Jigsaw24 and NewTek made us feel a lot more confident going into the installation. The response from Jigsaw24 has always been second to none. They've been fantastic at getting back to us if any issues have ever arisen – we've had a response within 24 hours and we've had a fix within a couple of days. It's been a really positive experience from our point of view. And I think if it wasn't for the help that we'd had, then we probably wouldn't be as successful as we are now."



Making an events space broadcast-ready

Because the space was originally developed by the events management team, it needed a few last minute additions to make it broadcast-ready. "With our experience on the broadcast news set, we were able to advise the events team on additional elements they might need – autocue for scripting, talkback systems for the production crew and things like that," said Christopher.

"We worked with Jigsaw24 to make the whole thing broadcast-capable, find out which lights would work and how we could improve the space to get broadcast-quality lighting in. We've worked with them on big and small projects in the past, and have a great deal of trust in them. We know they'll support us and be able to advise us on what we need to achieve any project brief."



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Christopher Leese, Broadcast Technical Instructor, Staffordshire University.

Impressing students, parents and the university executive

“The feedback has been fantastic,” said Christopher. “Everyone’s been blown away, including the executive here at the university. It’s the best facility that we have, and it’s really helped to grab interest for the award. Selling an events management course visually on an open day was really challenging, but now we’ve got this facility, and can say to students ‘this is what you get the opportunity to be involved in, this is what you get to actually use,’ which really helps to get them excited.”

Parents have been impressed by the lab, too – one father even signed up for the course along with his son after seeing the facility on an open day. “The response has been brilliant, but more importantly it puts the students in a much stronger position when they actually want to go out and find work in that field.”



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To find out more about NDI workflows and video over IP, get in touch with the team:

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