

School of Computing, Engineering & Digital Technologies

Transmedia, Digital Art & Animation



Learning Resources & Facilities

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Introduction

The School of Computing, Engineering & Digital Technologies at Teesside University is a centre of excellence across engineering, computing, games and animation, media, communications and the digital arts.

Our specialist engineering, digital production facilities and specialist teaching studios cover a range of disciplines and are all at the forefront of digital and technological innovation.

Computing Laboratories and Studios

We have more than 30 networked laboratories and studios across various buildings (Athena, Europa, Mercuria, Parkside, Phoenix and Stephenson) equipped to industry standards and running the very latest industry software. Dedicated facilities are provided for specialist areas such as animation & visual effects, computer science, concept art, digital media, film & television, photography, music & performance, games design and programming, computer networks and post-production (a comprehensive list of all our teaching space/studios can be seen in Appendix 1).

Considerable efforts have been made to ensure the accuracy of information provided. Applicants are advised that developments after the guide has been published may lead to omissions and inaccuracies in the information provided in this guide, for which the University disclaims legal liability. The information given in the course guide does not impose on the University any obligation to provide or to continue to provide, any resource, facility or amenity described in the guide. For latest information on university courses, facilities and learning resources, please visit the University web pages at tees.ac.uk, our contact us using scedt-enquiries@tees.ac.uk



Aurora House

Aurora House offers staff and students access to technical support for our programmes and facilities, our kit hub (and online equipment/resource booking system), specialist Media production facilities, our TU-Can digital studio, TU-Xtra broadcast studios and our in house research and developer team.

The facility boasts a range of specialist media facilities too, including; television studios, radio studios, post-production video/ audio editing facilities and equipment hire.

Aurora House Television Studio

The larger of our two TV studios provides a live High Definition TV broadcast studio environment and vision gallery. The studio floor is equipped with three broadcast cameras, Autocue hoods, a motorised Jib Arm, LED lighting rig, chroma green screen capability and a soundproof audio booth.

Our live TV studio is equipped with the Tricaster studio control software and manages the various live camera feeds from the studio floor, can produce virtual sets (using green screen keying), takes external online sources and can connect with our second TV studio (located in the Athena Building). All this hardware and software combined, allows users to produce high-end ambitious live broadcasts that can be streamed to various online sources (including YouTube and Facebook live).





TV News Studios

Our HD TV News Studios provide students with a live multi-camera production environment, allowing for live streamed broadcasts. Utilising the Tricaster system, our HD studios comprise a studio production gallery, audio gallery (complete with post production audio editing facilities), a voice-over booth and a live studio floor equipped with three cameras.





Sound Stage & Recording Studios

Located in the Phoenix Building is our state-of-the-art two-storey soundstage measuring 8m x 6m as well as a professional Sound Recording Studio which are among the best in the UK.

We have a top class, track based computer controlled camera system which is capable of creating amazing visual effects – from simple crowd duplications, to highly detailed complex artificial live action sequences.





Ground Floor Post-Production & Colour Grading Suites

Aurora house offers six self-contained post-production edit suites, complete with air-conditioning. These individual suites provide students with a comfortable space to complete post-production projects. These suites are bookable via the Facilities and Resources page (<https://scedt-apps.tees.ac.uk>).

Each suite comprises of an iMac, 40-inch UHD monitor and stereo sound system.

Post-Production software includes:

- Adobe Creative Suite
- Final Cut Pro X
- Davinci Resolve

Students have access to shared network storage across all our Media PCs and Macs in the form of EditShare. This allows the user to open, edit, playback and render large media files on any connected workstation in Aurora house, the Athena TV studio, and the Athena EditShare studios. Students are provided with this shared space for the duration of their programme of study.

Three of our ground floor edit suites incorporate a Colour Grading facility. These studios accommodate video editing, post-production, compositing and colour correction. It can then be encoded and mastered into as many formats needed for delivery, such as H.264 for Blu-Ray or DCP for cinema.





Aurora House Reception - Kit Hub

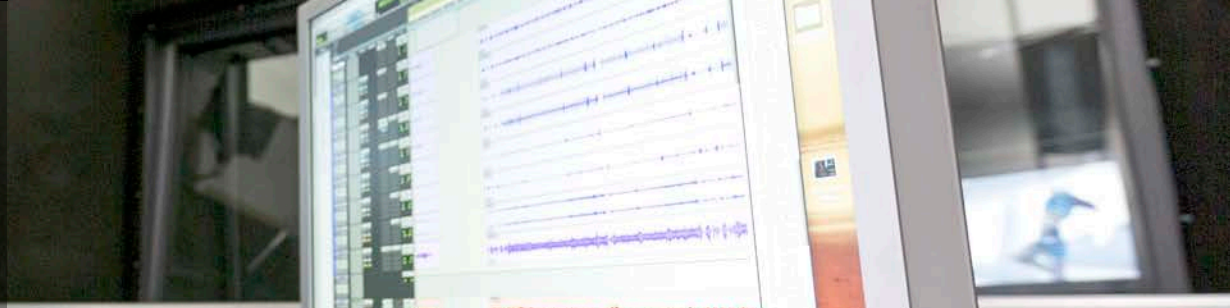
Our main reception and Kit Hub is where students and staff come to collect any bookable equipment and resources available within the school. We offer a wide array of industry standard broadcast media and computing equipment. All equipment is made available through our online booking system, Connect2 (<https://scedtbookings.tees.ac.uk>). Before collecting any kit, students are required to complete an online risk assessment, which is authorised by a tutor. The technical team are also on hand in the reception area of Aurora House. Here you can ask for assistance with software and hardware, book tutorials or any other support needs you may have.

TU-Xtra Radio Studios

Two radio studios provide broadcast for tuxtra.co.uk, the campus online media platform, developed to support media programmes across the school. TU-Xtra broadcasts 24/7 during term time.

There are three studios. Studios 1&2 provide live broadcasting and newsgathering while Studio 3 manages scheduling and automation for broadcast.

Studio 1 contains two live PTZ cameras, allowing the radio studios to become live TV studios, which are vision mixed from a production gallery in studio 2 using the Tricaster system. Each of the studios is complete with Industry standard radio playout and scheduling software. Studios are complete with four microphone channels, telephone lines, playout software, newsgathering and automation software, CD decks and Aux inputs. Each studio is connected to allow for simulcast broadcasting.



Recording Studios

Our Sound Recording facilities include the Avid DigiDesign 32 track mixing console and DigiDesign's award winning ProTools HDX software which is regularly used on music productions, movies, television dramas and features.





Music Technology Lab

Our specialist lab, developed to teach our Music Technology programme, provides students with the very latest digital audio production, sequencing and composition software and hardware. The lab provides access to Pro-Tools, Sibelius, Ableton Live, Reason and a range of audio interfaces, instruments and music production tools.

Newsroom

The Convergent Newsroom provides students with a live 'newsroom' teaching environment. Workstations are equipped with shared network storage utilising the Editshare network and have access to the latest video, audio and web editing platforms.

Video Production Mac/PC lab

This Mac/PC lab, offers a range of video and audio production software. Equipped with shared network storage, students can access and edit video and audio projects. Workstations are equipped with the Adobe Creative suite and Final Cut Pro post-production software.





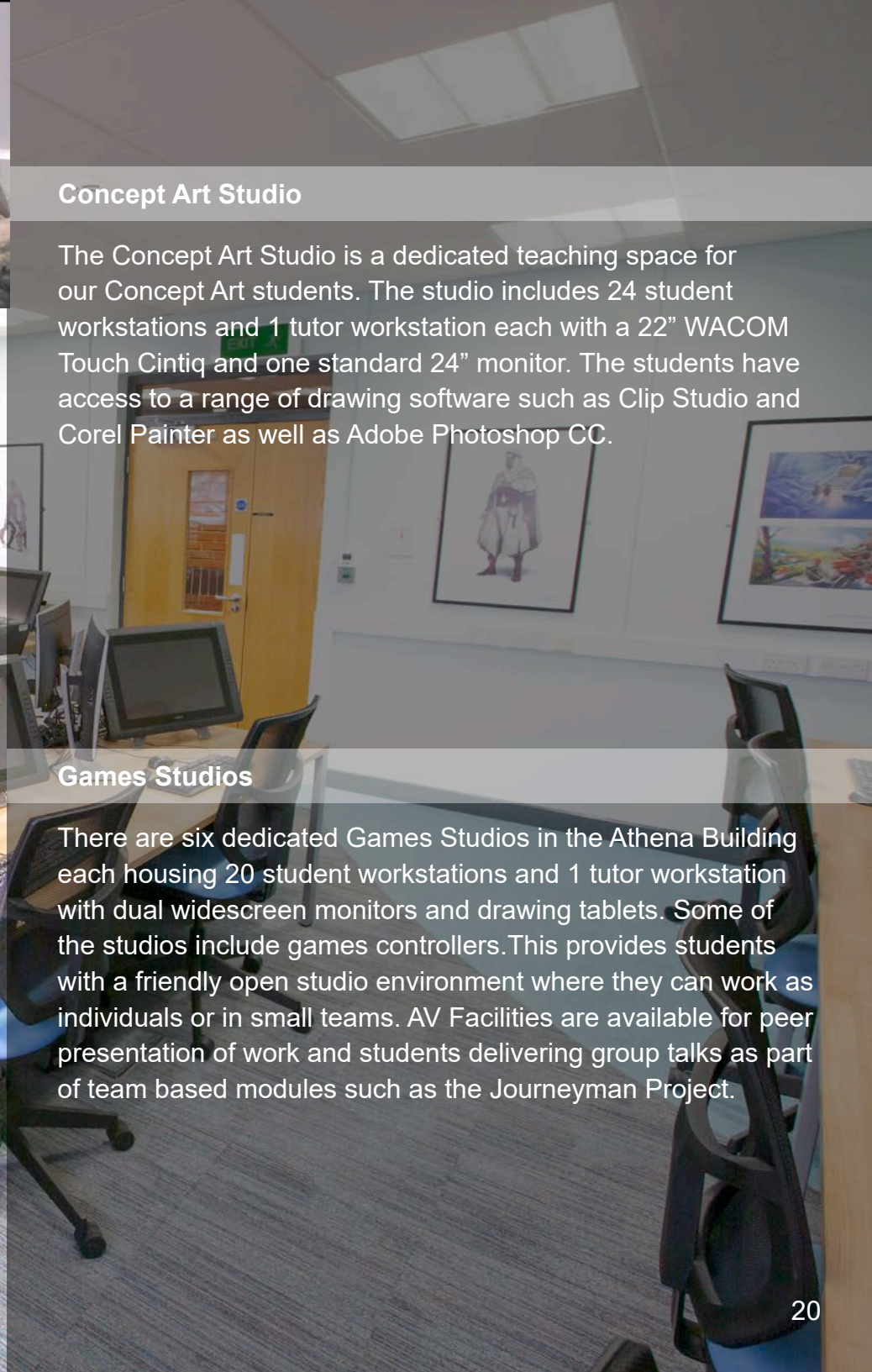
Concept Art Studio

The Concept Art Studio is a dedicated teaching space for our Concept Art students. The studio includes 24 student workstations and 1 tutor workstation each with a 22" WACOM Touch Cintiq and one standard 24" monitor. The students have access to a range of drawing software such as Clip Studio and Corel Painter as well as Adobe Photoshop CC.



Games Studios

There are six dedicated Games Studios in the Athena Building each housing 20 student workstations and 1 tutor workstation with dual widescreen monitors and drawing tablets. Some of the studios include games controllers. This provides students with a friendly open studio environment where they can work as individuals or in small teams. AV Facilities are available for peer presentation of work and students delivering group talks as part of team based modules such as the Journeyman Project.





Motion Capture Studio. Vicon Optical Camera System

The MoCap Studio is adjacent to the VR Studio. Here you will find some of the best motion capture equipment available in the UK.

Motion capture, or mocap, is a term used to describe the process of recording human movement for use in animations and games.

18 Infrared cameras fixed around the room capture the movement of reflective markers. These are accurate to approximately 2mm and can handle fast and complex movements. There are six suits of different sizes, and multiple-person capture is possible.

The system is not restricted to human subjects/actors. For example, the School has captured data from dogs.

The room also boasts a range of other devices such as laser scanners and a 3D printer.

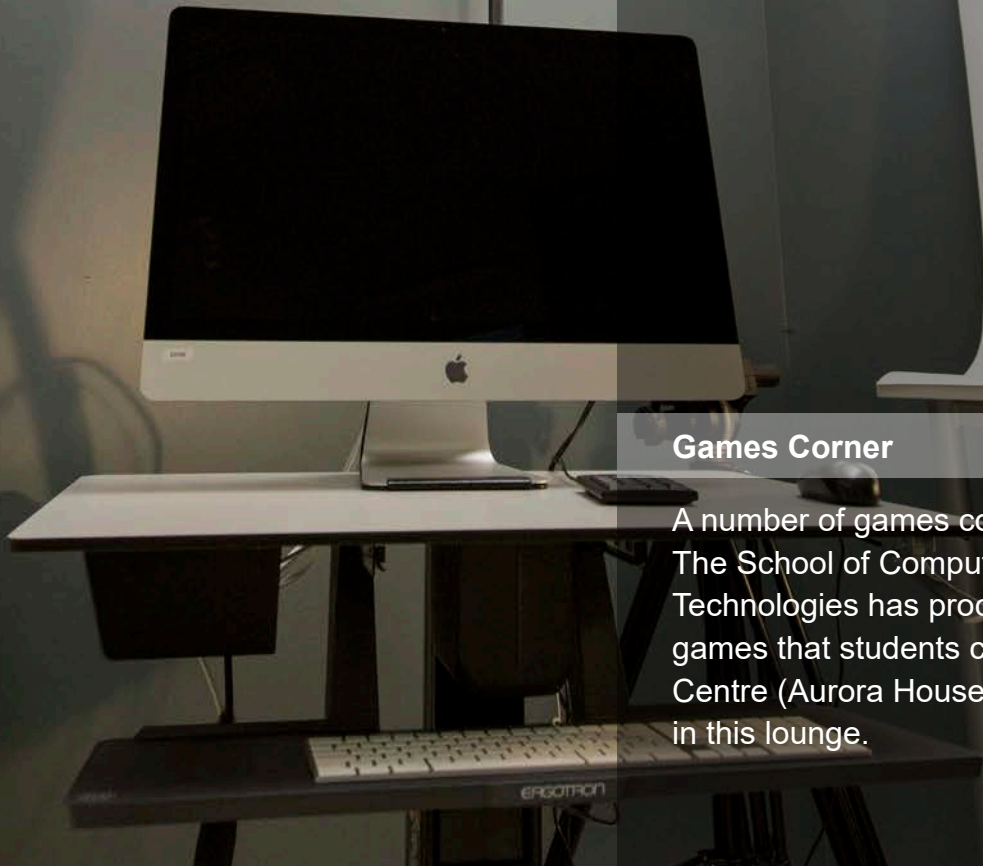




2D Animation Studio

Our 2D stop frame animation studios are equipped with six animation studios. Each workstation is 2.3m x 2.3m made up of its own magnetic animation table, tri-colour infinity curve backdrops, Dedo LED lighting rig and Canon 5D Mark IV capture camera with interchangeable lenses all of which connects to a 27 inch iMac complete with DragonFrame motion capture software and the Adobe Creative suite.

There is also an additional area for model making and prop building.



Games Corner

A number of games consoles are available in this area. The School of Computing, Engineering and Digital Technologies has procured a variety of computer games that students can sign out from the Media Centre (Aurora House) to test, evaluate or simply play in this lounge.



Animation and Visual Effects [AVFX] Studios

Each studio has 20 student workstations and 1 tutor workstation, each with dual widescreen monitors and drawing tablets providing students with a dedicated and inspiring environment to produce 2D and 3D animation & VFX from the pre-production stage right through to post-production. Students have access to the latest versions of industry standard software such as Autodesk Maya, Nuke and Houdini. Pluralsight, an online learning support tool is also available.

The AVFX Suite also has a dedicated screening/meeting room for up to 12 people. Staff and students meet here to screen work and provide feedback on work in progress.

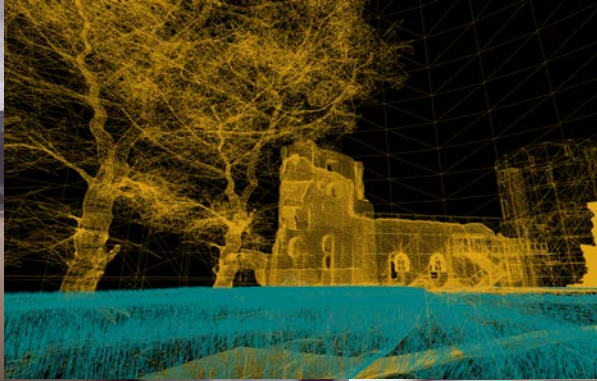
VR & Photogrammetry Studio

VR headsets provide an immersive view of a 3D environment or game.

The user can interact with the environment using game controllers, and can look around by moving their head. Sensors in the headset track their position and gaze direction, although movement is limited by trailing cables.

The VR Studio currently has eight HTC Vive headsets with the latest SDK available for student use. The studio also houses a photogrammetry suite for the high resolution photography of real life objects for use in virtual 3D spaces.





TUCan Studio

An innovative production studio bringing together multi-disciplinary groups of Teesside University staff, graduates and students together under one roof to work on commercial digital projects for our external partners.

Based in the School of Computing, Engineering & Digital Technologies, we have expertise spanning across numerous creative digital areas including animation, media production, software and web development, VR and augmented reality experiences.

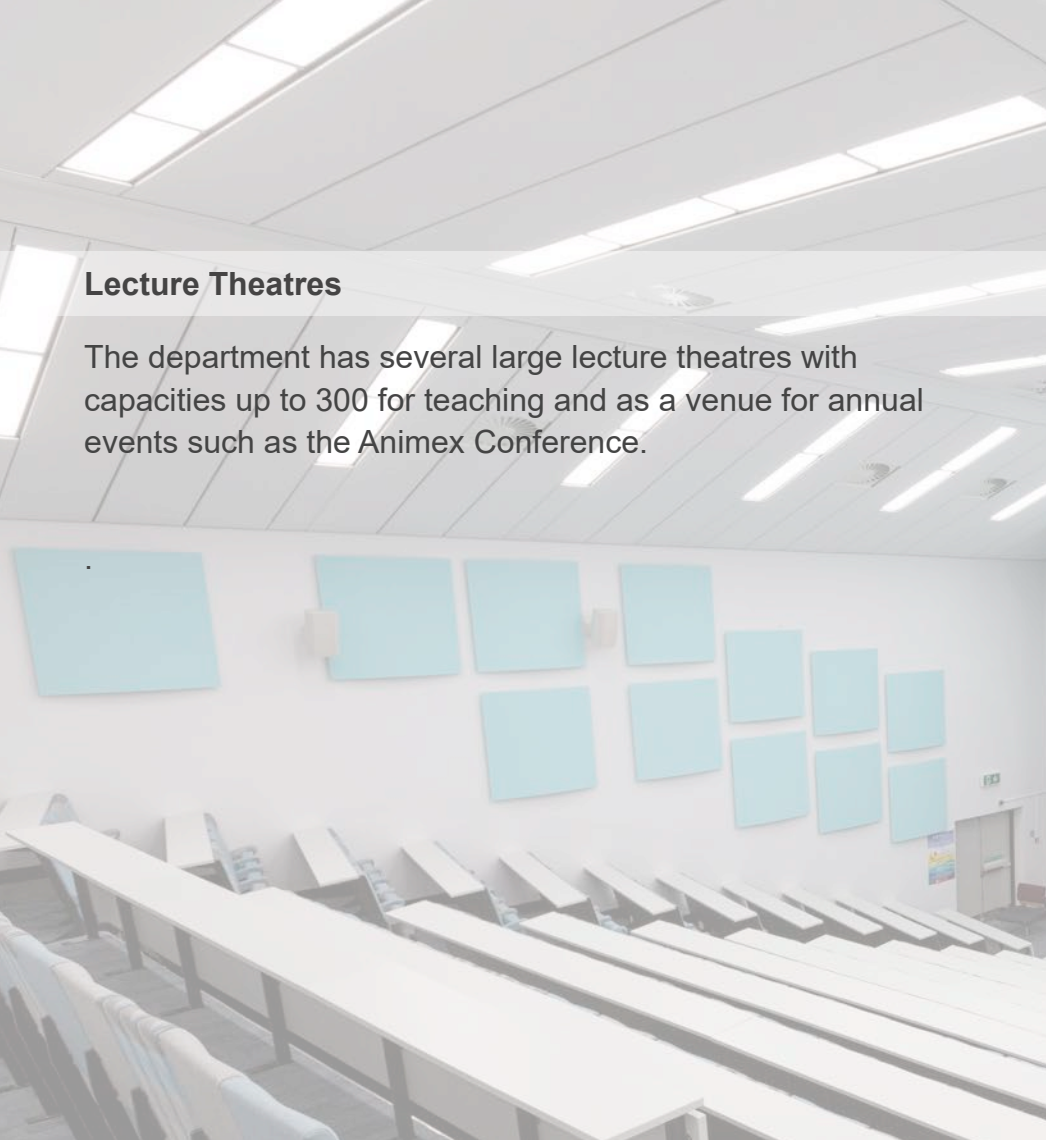
Together we can work with you to develop new products, proof of concepts or cutting edge research whilst giving our talented students the opportunity to develop essential work ready skills.

Live projects undertaken by the studio include AR and VR app development, video production, 360 immersive production, web design and software development. The studio can be found online at www.tucanstudio.co.uk



Lecture Theatres

The department has several large lecture theatres with capacities up to 300 for teaching and as a venue for annual events such as the Animex Conference.





Drawing Studios

Life drawing takes place in the airy, open plan Drawing Studio and consists of a mixture of male and female life models supported by a tutor.

Tables, easels, drying racks, drawing boards and A2 grey board and A3 cartridge paper are all readily available along with a range of art materials such as acrylic and watercolour paints, putty rubbers, graded drawing pencils, coloured pastel sticks, graphite sticks, charcoal and specialised animation drawing pencils. Still life objects are available for compositional drawing.

In the adjacent room we have a second drawing area. This studio is also used as a wet room space with large tables and double sinks allowing students to create models out of clay.

Traditional Animation Studio

This dedicated space has a small number of Epson GT Pro A3 scanners connected to computers running ToonBoom Harmony software for digital 2D animation.

We also have 20 A3 light boxes available for students to use.

Comics Studio

The Athena building is home to the comics lab, developed to teach students various forms of creative disciplines relating to comics and sequential design.

Appendix One: Studios & Laboratories

Athena

AG.06	Convergent Newsroom (PC Lab)	A2.07	Concept Art
AG.09	Broadcast News Studio	A2.08	Games Studio
AG.10a	Sound Control (Connected to TV Control & Broadcast News Studio)	A2.09	Games Studio
AG.10b	TV Control (Connected to Sound Control & Broadcast News Studio)	A3.02	Linux Studio & Digital Media Programming & Database Studio
AG.11	Media Production Lab	A3.04	Stop Motion
AG.12	Athena Edit Lab	A3.05	Drawing Studio
A2.01	Comics	A3.07	Drawing Studio
A2.03	Stop Motion	A3.08	Digital Media Programming and Database Studio with Editshare.
A2.05	Games Studio	A3.09	Games Studio
A2.06	Games Studio	A3.10	Games Studio

Aurora

AU1.04	TUCan Studio
AU0.05	Aurora TV Studio

Stephenson

IC0.18:	Enterprise Laboratory.	IC1.01a	Animation and Visual Effects Studio + Games Studio
IC0.19:	Civil Engineering / Built Environment Laboratory.	IC1.01b	Animation and Visual Effects Studio
IC0.26 / 0.28,	Engineering Workshop and Foundry	IC1.01c	Animation and Visual Effects Studio
IC0.33:	Electro-technology Laboratory.	IC1.01d	Meeting Room (Screening room)
IC0.34:	Control Systems Laboratory	IC1.60	Motion Capture
IC0.35:	SCADA Laboratory	IC1.61	Virtual Reality
IC0.37A	Flight Simulation	IC1.63	Computer Laboratory
IC0.37B	Thermo-fluids Laboratory	IC1.65	Computer Laboratory
IC0.38	Mechanical Science Laboratory	IC1.69	Electronics and Communications Laboratory
IC0.39	SEM Laboratory	IC1.72	Computer Laboratory
IC0.42	Applied Materials Laboratory	IC1.73	Computer Laboratory
IC0.47A	Engineering Projects Laboratory (Formula Student, Electric Motorbike & Aerospace).	IC1.76	Computing Laboratory
IC0.47B	Power Engineering Laboratory	IC1.77	Digital Media Programming and Database Studio

Greig

G1.47	Meeting Room
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Europa

IT0.11	Final Year Studio	IT1.35	Freelance Studio
IT0.13	MAC Studio (Mobile Programming)	IT1.31	Digital Media Programming and Database Studio
IT0.15	Linux Studio	IT1.34	Collaborative Learning Environment Studio
IT0.31	Traditional Animation Studio	IT2.34	Networks Studio
IT1.08	Digital Media Programming and Database Studio	IT2.41	Networks Studio
IT1.10	Digital Media Programming and Database Studio	IT2.42	Networks Studio
IT1.11	Linux Studio	OL3	Concept Art Studio
IT1.30	Freelance Studio	OL8	Games Programming Studio
		OL9	Games Programming Studio

Mercuria

MC0.04	Hall
MC0.06	Dance Studio
MC0.10	Music Studio

Middlesbrough Tower

M8.04	Hydrogen Project / Research Laboratory
M10.08	Research Laboratory

Orion Building

CE0.01	Distillation Process Laboratory
CE0.02	Process Laboratory
CE0.03	Open Access Computer Laboratory
CE1.01	Distillation Column Laboratory
CE1.02	Oil and Gas Engineering Laboratory
CE1.03	Open Access Computer Laboratory
CE1.13	Computer Laboratory
CE1.20	Process Engineering Laboratory
CE2.01	Distillation Column Laboratory
CE2.02	Multi-phase Separation Laboratory.
CE2.03	Open Access Computer Laboratory

Phoenix

PG.07	Music Lab
PG.16	Sound Stage
P2.10	Postgraduate Studio – Concept Art
P2.11	Postgraduate Studio

Parkside West

PSW0.22	Dark Room
PSW0.13	Photography Studio 1
PSW0.14	Photography Studio 2

Waterhouse

W2.01	Performance Prep Space
W2.02	Performance for Live & Recorded Media Studio



Please contact the School of Computing, Engineering & Digital Technologies on 01642 342631 or email scedt-enquiries@tees.ac.uk.



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