TIGA™ UNIVERSITY ACCREDITATION MARCH 2016

AUTHORED BY:
DR MARK EYLES, TIGA EDUCATIONAL ADVISOR
DR RICHARD WILSON, TIGA CEO

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Games developers compete to a critical extent on the quality of their teams. TIGA introduced the TIGA Accreditation process in January 2015 to ensure that universities and colleges can produce graduates with industry relevant skills. The TIGA Accreditation system accredits the very best undergraduate and postgraduate university courses enabling both prospective students and game developers to identify those courses that are producing industry ready graduates.

In 2015, 16 courses at the following universities achieved TIGA Accreditation: Bournemouth University (1 course); University of Portsmouth (2 courses); Sheffield Hallam University (3 courses); University of the West of England (1 courses); Staffordshire University (7 courses); and City University London (2 courses).

**INTRODUCTION**

**TIGA represents developers, digital publishers, service companies and education providers and is the trade association for the video games industry.**

Our core purpose is to strengthen the games development and digital publishing sector. We achieve this by campaigning for the industry in the corridors of power, championing the industry in the media and helping our members commercially. TIGA is intent on building an enduring organisation which continually improves, a business that will make a significant impact on the games industry and so benefit our membership and the wider economy. Since 2010, TIGA has won 24 business awards, an achievement which reflects TIGA’s drive for improvement and to meet best practice.

**KEY FEATURES OF THE TIGA ACCREDITATION PROCESS:**

- All TIGA Accredited courses teach skills required by the games industry. These skills are also becoming increasingly in demand in other related industries such as the synthetic training industry.

- Courses are examined by a panel of industry and academic experts to ensure that students are developing games industry skills as well as transferable skills (communication, team working, problem solving and so on) important to the games industry and at an appropriate level.

- Universities are also required to show that they have the resources (hardware, software, staff, labs and so on), curriculum, syllabi, quality systems and student support to deliver their courses.

- As an important part of the accreditation process courses provide details of the percentage of their graduates finding work in the games industry and also in related industries.

- Each course is judged on its own merits and must demonstrate that it works closely with the games industry to stay up to date and relevant. By judging courses in this way TIGA Accreditation is suitable for a wide range of games courses, including those with a programming, art, design or business/entrepreneurial focus.

- Additionally it is able to keep up to date with the latest developments in game technologies and does not have prescribed lists of skills, which can become limiting in the extremely fast moving games industry. For a course to be accredited the university must have identified specific game developer skill needs and developed their course to meet these.

- Accreditation lasts for 5 years at which time courses are re-examined to ensure they are maintaining their standards. If successful they are re-accredited. Courses must also submit a yearly report to the TIGA Accreditation Committee.

- Accreditation is open to all TIGA education members. TIGA Accredited courses are supported through TIGA’s educational initiatives and have assistance in remaining abreast of current industry practices.
TO DATE 16 COURSES AT THE FOLLOWING UNIVERSITIES HAVE ACHIEVED TIGA ACCREDITATION: 11 UNDERGRADUATE AND 5 POSTGRADUATE. ALL OF THESE COURSES HAVE BEEN THOROUGHLY INVESTIGATED TO ENSURE THEY ARE ENABLING THEIR STUDENTS TO DEVELOP THE SKILLS REQUIRED BY THE GAMES INDUSTRY.

TIGA ACCREDITED COURSES

► UNIVERSITY OF PORTSMOUTH

- BSc (Hons) Computer Games Technology
- BSc (Hons) Computer Games Enterprise

► SHEFFIELD HALLAM UNIVERSITY

- BSc (Hons) Game Software Development
- MComp Game Software Development
- MSc Game Software Development

► BOURNEMOUTH UNIVERSITY

- BSc (Hons) Games Technology

► UNIVERSITY OF THE WEST OF ENGLAND

- BSc (Hons) Games Technology

► CITY UNIVERSITY LONDON

- BSc (Hons) Computer Science with Games Technology
- MSc Computer Games Technology

► STAFFORDSHIRE UNIVERSITY

- BSc (Hons) Computer Game Design
- BENG (Hons) Computer Games Design
- MENG Computer Games Design
- BSc (Hons) Computer Gameplay Design and Production
- BENG (Hons) Computer Gameplay Design and Production
- MENG Computer Gameplay Design and Production
- BSc (Hons) Computer Gameplay Design and Programming

TIGA’s University and College Accreditation system has received strong support from industry and from participating academia.

GISELLE STEWART OBE, DIRECTOR, UK CORPORATE AFFAIRS, UBISOFT:

“We are very pleased that our Games Technology course here at Bournemouth University has now received TIGA accreditation approval and are very glad that our industry engagement efforts have been recognised. Moreover, it is excellent to see the heavy emphasis placed on employability during the accreditation process, as one of the main aims of the course is to provide a set of skills which will place our graduates in the domestic and/or national games development sector and set them up for a successful and long-lasting career. We hope to be able to accredit our more recent Games Awards activities and to further improve what we do. The accreditation makes it clear to our current generation of students, and the next, that SHU is delivering the highest quality courses.”

DR CHRISTOS GATZIDIS, PROGRAMME COORDINATOR FOR BSC GAMES TECHNOLOGY AND BSC GAMES PROGRAMMING, BOURNEMOUTH UNIVERSITY:

“We are delighted that our Games Technology course here at Bournemouth University has now received TIGA accreditation and are very glad that our industry engagement efforts have been recognised. Moreover, it is excellent to see the heavy emphasis placed on employability during the accreditation process, as one of the main aims of the course is to provide a set of skills which will place our graduates in the domestic and/or national games development sector and set them up for a successful and long-lasting career. We hope to be able to accredit our more recent Games Programming course too in the near future.”

CARINA MCLANE, PROGRAMME LEADER - BSC GAMES TECHNOLOGY, UWE:

“We are delighted and honoured to have our Games Awards accredited by TIGA. It was a very thorough process to insure that our courses truly met the needs of industry and I’m glad to be able to say with the backing of TIGA that Staffordshire University successfully prepares Graduates for employment in the highly competitive world of the Games Industry.”

MARK FEATHERSTONE, COURSE LEADER BSC/ M Comp GAME SOFTWARE DEVELOPMENT AT SHEFFIELD HALLAM UNIVERSITY:

“We are very pleased that our courses in games technology have been accredited by TIGA, who have recognised our efforts to produce graduates with valuable skills sought after in industry.”

DR MARK EYLES, UNIVERSITY OF PORTSMOUTH:

“TIGA Accreditation of the two games courses at the University of Portsmouth has reinforced our confidence in their industry relevance. This is a clear demonstration for our current, and future, students that our courses are of the highest quality. The TIGA accreditation team thoroughly examined our course content and delivery and was able to make insightful and helpful suggestions to further increase the relevance of our courses.”

DR BOBBIE FLETCHER, HEAD OF THE GAMES TECHNOLOGY GROUP AT STAFFORDSHIRE UNIVERSITY:

“We are delighted and honoured to have our Games Awards accredited by TIGA. It was a very thorough process to insure that our courses truly met the needs of industry and I’m glad to be able to say with the backing of TIGA that Staffordshire University successfully prepares Graduates for employment in the highly competitive world of the Games Industry.”

DIRECTOR OF THE MSC COMPUTER GAMES TECHNOLOGY COURSE AT CITY UNIVERSITY LONDON, DR GREG SLABAUGH:

“We are very pleased that our courses in games technology have been accredited by TIGA, who have recognised our efforts to produce graduates with valuable skills sought after in industry.”
Sheffield Hallam University launched the world’s first commercially released PlayStation 4 game, Piecefall, by a university. The game was built by final year students. Members of the student team behind Piecefall win a prize at this year’s Game Republic Student Showcase held at York University. A second team also won a prize, for their mobile game Block-a-lot.

Among a number of Sheffield Hallam graduates employed in the games industry, two stunning final year projects contributed to a pair of students getting fulltime positions at local game developer Sumo Digital. The students in question, Carl Jones and Steve Hartin, had both worked at Sumo during their placement and impressed their future employer. Steve Hartin’s final year project won a technical prize from Sony in recognition of the impressive technology he’d developed. He was the happy recipient of a brand new PS4 console.

Andrew Hague, Vice President of software engineering at Kwalee, a mobile development company, visited to evaluate Sheffield Hallam’s final year students’ game projects. Andrew Hague commented that, “It was great to see the facilities you have there and the quality of students.”

Students will need to work to milestones, react to feedback from Epic Games staff, and produce the highest quality work possible. It also presents students with a huge opportunity to work on an active project, gain an insight into the games development process and potentially have their work included in a shipped title!

Jim Brown, Lead Designer, Epic Games, commented on the relationship with Staffordshire University: “At Epic Games, we strive to stay on the cutting edge of our industry, our games, our technology, and our processes; through our relationship with the Epic Games Centre at Staffordshire University, we hope to keep the next generation of game developers on the cutting edge of education and industry experience. This is a once in a lifetime opportunity to see how games are made, and make meaningful contributions to an historic franchise.”

In June 2015 Staffordshire University held the first Epic Games Educational Summit. Epic Games, Staffordshire University and fellow educators in computer science and animation, interactive design and game development gathered to learn more about integrating Unreal Engine 4 into the academic curriculum.

Two alumni, now at CCP Trilamba Graphics team, visited to talk to current students at Staffordshire about the tools, processes and technology used in the development of CCP Games sci-fi MMO EVE-Online.

In 2015, graduates from Staffordshire found work in a wide variety of businesses, including: Playground Games, Dovetail Games, Parexell, Jozo Creative, Alacrity, Falmouth, Void Games, Scruffy Dog, TT Fusion, AMEY, Opposable Games, Bohemia Interactive and Exient.
THE UNIVERSITY OF THE WEST OF ENGLAND

The University of the West of England (UWE) had an incredibly busy year, here are a few highlights:

**January:** University hosts Global Game Jam.

**February:** UWE Games / PlayWest staff were finalists and won £5000 games dev funding from Bristol Green Capital Digital Challenge with Super Trash Heroes: [http://techspark.co/profile-super-trash-heroes/](http://techspark.co/profile-super-trash-heroes/)

**February:** PlayWest conference with graduates returning from Lionhead / Frontier as well as local developers Opposable Games / Mobile Pie to speak to current students about their experience in industry.


**July:** UWE Games / PlayWest had a stand at Develop and brought along 10 students and graduates to showcase work + 5 staff members with full event access [http://www.greenmanloaded.com/latest-news/2015/7/20/develop-conference-2015](http://www.greenmanloaded.com/latest-news/2015/7/20/develop-conference-2015).

**September:** New PS4 lab introduced! This was recommended in TIGA’s Accreditation Report for UWE.

THE UNIVERSITY OF PORTSMOUTH

Four student game development companies were successfully started by students on a sandwich year at the University of Portsmouth, including Turtle Squadron who ran a successful Kickstarter campaign which led to the release of their roleplaying game Villium Shards.

Programmer Matthew Roper, who worked on Villium Shards, now in his final year, has already started a programming job at Unity Technologies. He is now splitting his time between work and completing the final year of his degree.

A final year team of students built and released a game, City Block Cats, on Android and PC in one of their course modules.

After a very successful sandwich year as a game producer at Lionhead in 2013-14, University of Portsmouth student Alexia Christofi completed her degree in 2015 and immediately returned to her game producer role at Lionhead. She joins the 96 per cent of students from the Portsmouth games courses who get jobs or go on to further education shortly after completing their course (DHLE data for 2014 graduates).

CEO Rod Cousens and a team from Jagex visited the University of Portsmouth in December to give an afternoon of game development talks and show off their VR equipment to students from the Portsmouth, Bournemouth and Southampton Solent Universities.

THE UNIVERSITY OF BOURNEMOUTH

A group of final year Bournemouth University students on the BSc (Hons) Games Technology course have set up indie developer Rebourne Studios [www.rebournestudios.com](http://www.rebournestudios.com) and are working on their first release: Rite of Life. The game was Greenlit on Steam within two weeks and was funded following a successful Kickstarter campaign.
A high proportion of graduates from TIGA University accredited courses are securing jobs in the video games industry.

CITY UNIVERSITY LONDON
Proportion of graduates securing jobs in the games and related industries at the time of accreditation:

• over 20 per cent of graduates on BSc (Hons) Computer Science with Games Technology; including jobs that required the programming skills they learned on the course a total of 94% of students got jobs and looking at all graduate destinations the total employment level approached 100%.
• 53 per cent of graduates on MSc Computer Games Technology; including jobs that required the programming skills they learned on the course a total of 95% of students got jobs (again, the total employment level was close to 100%).

SHEFFIELD HALLAM UNIVERSITY
Proportion of graduates securing jobs in the games and related industries at the time of accreditation:

• 56 per cent of the students who complete the BSc (Hons) Computer Games Enterprise course go on to work in the games industry or for companies using specialist technical skills gained on the course; overall, 93 per cent are in some form of employment;
• 61 per cent of the students who complete the BSc (Hons) Computer Games Technology course go on to work in the games industry or for companies using specialist technical skills gained on the course; overall, 96 per cent are in some form of employment.

UNIVERSITY OF PORTSMOUTH
Proportion of graduates securing jobs in the games and related industries at the time of accreditation:

• 56 per cent of the students who complete the BSc (Hons) Computer Games Enterprise course go on to work in the games industry or for companies using specialist technical skills gained on the course; overall, 93 per cent are in some form of employment;
• 61 per cent of the students who complete the BSc (Hons) Computer Games Technology course go on to work in the games industry or for companies using specialist technical skills gained on the course; overall, 96 per cent are in some form of employment.

UNIVERSITY OF THE WEST OF ENGLAND
Proportion of graduates securing jobs in the games and related industries at the time of accreditation:

• 26 per cent of graduates on BSc (Hons) Computer Games Design;
• 67 per cent of graduates on BEng (Hons) Computer Games Design;
• 58 per cent of graduates on the MEng Computer Games Design;
• 49 per cent of graduates on BSc (Hons) Computer Gameplay Design and Production;
• 67 per cent of graduates on BEng (Hons) Computer Gameplay Design and Production;
• 50 per cent of graduates on MEng Computer Gameplay Design and Production; and
• 31 per cent of graduates on BSc (Hons) Computer Games Design and Programming.

BOURNEMOUTH UNIVERSITY:
Proportion of graduates securing jobs in the games and related industries at the time of accreditation:

• 26 per cent of graduates on BSc (Hons) Computer Games Design;
• 67 per cent of graduates on BEng (Hons) Computer Games Design;
• 58 per cent of graduates on the MEng Computer Games Design;
• 49 per cent of graduates on BSc (Hons) Computer Gameplay Design and Production;
• 67 per cent of graduates on BEng (Hons) Computer Gameplay Design and Production;
• 50 per cent of graduates on MEng Computer Gameplay Design and Production; and
• 31 per cent of graduates on BSc (Hons) Computer Games Design and Programming.

1. All figures referring to graduate employment destinations in this section are based on tracked students and DHLE data for all the universities (DLHE is Destinations of Leavers from Higher Education; see https://www.hesa.ac.uk/stats-dhle).
TIGA accredited university games courses typically forge strong links with industry. For example, Sheffield Hallam has close ties with Sumo Digital; Staffordshire University with Epic Games; and City University London has an industry advisory board which includes industry practitioners from a variety of games businesses.

Staffordshire University has a particularly strong relationship with Epic Games and features an Epic Games Centre on the campus.

Likewise, City University London boasts The City Interaction Lab which gives students opportunities to work with cutting edge technologies. The University of Portsmouth provides students with access to a Motion Capture Suite and a Virtual Reality room.

As an example, Staffordshire University’s games courses enable their students to use current game engine technologies and also an impressive motion capture facility.

TIGA accredited university games courses typically demonstrate innovative approaches to educating their students and demonstrate areas of best practice.

BOURNEMOUTH UNIVERSITY
- A range of speakers from industry ensure that students have valuable opportunities to network and hear about the latest industry developments;
- the course is part of local industry initiatives, such as the Southern Independent Games Network;

CITY UNIVERSITY LONDON
- A high percentage (50% or more) of students on both of the TIGA Accredited courses take advantage of placement opportunities. The university offers exceptional support in this area through its Professional Liaison Unit, internships and the Professional Pathway option. This industry engagement with industry is clearly valued and prioritised by the university and the course teams.
- The Programming Bootcamp within the ‘Programming in Java’ module on the first year of BSc (Hons) Computer Science with Games Technology requires students to make a game. This early experience of game development on the course gives the students a useful and very real idea of the challenges and complexity of game development.

UNIVERSITY OF PORTSMOUTH
- approximately 15 per cent of students secure placements in games businesses;
- the University operates an Advanced Games Research Group that informs teaching;

THE UNIVERSITY OF THE WEST OF ENGLAND
- provides the in house PlayWest development studio which affords students valuable opportunities to work in an industry environment on commercial projects; and
- the PlayWest Conference gives students valuable opportunities to network with developers and showcase their work as well as hearing the experiences of course alumni.
City University London’s games courses deliver a range of strong game programming skills, with a particular emphasis on the hard programming skills.

University of Portsmouth furnishes students with the skills to work in both the games industry and other industries, while also equipping students with a wide range of transferable skills such as communication skills, project management, team working, experience in making presentations and self-directed study skills. Graduates of the BSc (Hons) Computer Games Enterprise course are equipped with the necessary skills to enter the games industry or start their own business in the games industry.

Sheffield Hallam’s accredited games courses have particular emphasis on console development skills.

Staffordshire University’s accredited courses enable students to develop a wide range of industry relevant skills that meet the needs of small indie games businesses and large AAA studios.

At the University of the West of England there is a valuable focus on group working. Students work together collaboratively on group projects and support each other cooperatively on individual projects. There is an awareness of the commercial context of the larger projects.

Graduates from City University London’s TIGA Accredited games courses are prepared by both courses to work as programmers in both game development and for companies that require game development skills, such as simulation companies. That some graduates choose lucrative careers in other industries, and are courted by those industries due to the high level of skills they have developed as game programmers, is a testament to the University.

Portsmouth’s two games courses positively encourage students to set up their own businesses during study, where they are furnished with the requisite entrepreneurial and management skills to build a successful business, whilst also learning the technical skills required in the industry. This is particularly the case with the BSc (Hons) Computer Games Enterprise course.

The focus of Sheffield Hallam’s three courses is on giving students the skills required to work in existing game development companies or other industries requiring a similar set of skills. Graduates would typically be expected to work as part of programming teams on big game developments. Although graduates could also find jobs in small indie developers or set up their own small development companies this is not a main focus of these courses.

The courses that run within the Games Design/Technology Group at Staffordshire University are focussed on enabling students to develop the skills required to find work within both smaller indie game developers and also larger AAA studios.

Students at the University of the West of England are prepared by the course to work as programmers in both game development and for companies that require game development skills, such as companies using virtual reality.

In December 2015 Mark Eyles carried out some research into TIGA Accredited courses, investigating themes and qualities they share in common. He developed this model of what lies at the heart of TIGA courses:

- **Industry Focus**
  - The courses joined TIGA and so are members of an industry association
  - Practical industry focussed courses
  - Practical projects and coursework
  - Vocational focus, designed to prepare students for industry jobs
  - Though still developing higher critical thinking and problem solving skills [levels 4 - 7]
  - Career advice, often from the course team, supports this
  - Importance of portfolios
  - Often have ex-industry lecturers
  - Close ties with developers
  - Industry talks
  - Industry advisory boards
  - Some courses had very strong ties with one developer, and weaker ties with others

- **University as a Game Developer**
  - Professional software and hardware
  - This is viewed as non-negotiable minimum requirement for these courses
  - Informed by industry
  - Often cutting edge technologies
  - Group projects (normally cross disciplinary) that are run along industry lines
  - Often taking agile approaches
  - Often (but not always!) result in playable games
  - Game development studios within, or very closely affiliated to, the university

The following sections describe each of the elements of this model in a little more detail:
FLEXIBILITY OF STUDENT LEARNING EXPERIENCE
• Course content responds rapidly to industry developments (i.e. new consoles)
• Courses rapidly evolve beyond their specification documentation
• So, course/module specification documentation is out of date and does not reflect what is actually taught
• Lecturers are flexible in responding to student needs
• For example, negotiating individual project areas and priorities
• Students can customise their learning
• Both through optional modules and choices within modules
• Students develop specialist skills in a chosen area (developing a T-shaped skills profile: “Jack of all trades and master of one”)
• Placements and internships are encouraged and supported

ENTREPRENEURIAL ATTITUDE
• Business startups are supported and encouraged
• Game jams and other extra-curricular activity encourages an entrepreneurial attitude
• There is university support (i.e. business incubation support)

OUTWARD FACING
• Encourage and support students to attend industry events
• Game shows and conferences
• Game jams
• Showcase student work
• Support staff in engaging with industry and industry events
• Value alumni

DIVERSE OFFERINGS
• Every course is different
• Responsible for determining its specific syllabus
• Every course has identified a range of industry roles
• Every graduate has a unique set of skills
• As a result of the flexibility built into the courses
• They also have a unique experience
• There is no ‘one size fits all’ solution...

MISSING OPPORTUNITIES
• Often do not track or engage alumni well enough (lack time, which is in short supply)
• Do not always make full use of industry contacts
• Other departments within the university do not recognize the value of game development approaches and technologies
• Cutting edge technologies
• Game design thinking is it at the heart of many 21st century ‘people facing’ systems (shopping, healthcare etc)
• Universities can overload these popular games courses with students, restricting lecturer time for research, outreach, innovation and industry engagement

CONCLUSION
All the courses have a very focussed and well developed industry approach to the learning activities of their students, often to the extent that in-house game developers emerge. These in-house game developers, such as Steel Minions at Sheffield Hallam (http://steelminions.wix.com/steelminions) and PlayWest at UWE (http://playwe.st/let-us-introduce-ourselves/), are run by a mixture of staff and students, importantly giving staff and opportunity to keep their skills current and the students an industry experience.

The other key element is diversity, both between courses and within individual courses. Each course has identified a specific set of skills that are required by industry and teach to these. However, the games industry is itself large and varied, so no two courses are identical, though they often have similarities. There is diversity of experience between the students on each of these courses. Students have the ability to tailor their learning both through choosing between optional modules and also choosing specific topics/activities within modules.

Over ten universities have courses at the start of the accreditation process so the number of accredited courses is due to grow. With the collegiate and supportive approach TIGA Accreditation takes, making recommendations to improve and further enhance courses, the quality of graduates is set to improve and better address the skills requirements of the games industry. The courses that are already accredited continue to engage with each other at TIGA Education Think Tank events, sharing best practice and looking to improve game development education within higher education.

TIGA Accreditation has been recognised by HESA (Higher Education Statistics Agency) and now forms part of the KIS (Key Information Set) data that every university course displays online, so now future students have a clear way of judging which courses deliver the industry relevant skills they will need.
Get in touch with TIGA:

Tel: 0845 468 2330
Email: info@tiga.org
Web: www.tiga.org

@TIGAMovement
TIGAMovement
/company/tiga

For further information, you can also contact:

REPORT AUTHORS

Dr Mark Eyles
TIGA EDUCATIONAL ADVISOR
Animation, Games & Enterprise Section Lead
School of Creative Technologies
University of Portsmouth
Email: mark.eyles@port.ac.uk
Telephone: 023 9284 5468

Dr Richard Wilson CMgr FRSA
TIGA CEO
Email: richard.wilson@tiga.org
www.tiga.org

For more information about TIGA membership, please contact:
Vanessa Joyce
Email: vanessa@tiga.org
Telephone: 07815780182
www.tiga.org

For more information about TIGA Accreditation, please contact either Dr Mark Eyles or Dr Richard Wilson