



UNDERGRADUATE PROGRAMME SPECIFICATION

Programme Title:	Games Technology
Awarding Body:	Staffordshire University
Teaching Institution:	Staffordshire University
Final Awards:	*BSc [Hons] Computer Games Design BEng [Hons]/MEng Computer Games Design
Intermediate Awards:	BSc; Dip HE; Cert HE: Computer Games Design
Mode of Study	Full Time/ Part Time
UCAS Codes:	*H132, H130
QAA Subject Benchmarks:	Engineering
JACS Code:	I620
Professional/Statutory Body:	IET [where indicated by an *]
Entry Year:	2016-17

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EDUCATIONAL AIMS OF THE PROGRAMME

This programme consists of a number of awards that are studied on a full time or part time basis. All named Awards lead to a Bachelor of Science BSc, Bachelor of Science with honours BSc [Hons] or Bachelor of Engineering with honours BEng [Hons] or a Masters, MEng with an extra year of study on top of the BEng [Hons].

The awards in this programme aim to give graduates the opportunity to gain the skills to advantage them in the Games Industry and develop them as confident well informed and well-rounded individuals.

BSc [Hons]/BEng[Hons]/MEng Computer Games Design

The aim of this award is to produce graduates who have the specific skills to work in the Games industry as Computer Games Animators or Computer Games 3D Modellers. The students' skills will allow students to work in an environment ranging from creating 3D models and animations to creating industry standard game/level designs and documentation.

To achieve this aim we have a number of objectives to fulfil:

- To develop the students' 3D modelling skills in high and low polygon modelling to create models, that fit the specific criteria to function within the games engine.
- To develop the students' skills at level design from the paper concept to a completed level within a games engine.
- To develop students' games production work flow, games documentation and project management skills.
- To develop students' to ability understand the business, marketing, and legal issues surrounding the different types of games contracts.

What is distinctive about this programme?

We are forward thinking in the field of delivery and support of student learning using tools such as Blackboard VLE, Forums and Virtual Project Rooms and resources such as online video tutorials and learning material.

We are active members of TIGA [Trade and Industry Games Association], and UKIE [UK Interactive Entertainment]. All our courses have been developed in conjunction with industry and use industry standard software and industry methods of games asset creation. We also are actively involved in research and support research informed teaching.

Due to our courses being BSc[Hons] or BEng[Hons] we find that industry see many of our graduates to be capable of being not only 3D Artists, 3D Animators, Level Designer or Games Designer but also Technical Artists or Technical Designers, whereas many other courses from other Universities don't equip their students in this way.

The Staffordshire Graduate

The Staffordshire Graduate represents a set of qualities that the University passionately believes is necessary for success in the 21st century. The Staffordshire Graduate is a reflective and critical learner with a global perspective, prepared to contribute in the world of work.

The awards within the Games Technology program area equip graduates with far more than academic skills, real-world knowledge, and discipline expertise. All awards nurture and develop attributes and qualities which will prepare the student for success in their career, their endeavours in the jobs market, and the undertaking of lifelong learning.

Students on Games Technology awards will be at the forefront of their chosen discipline. They will gather expertise from using valuable industry standard software and hardware through a large variety of the modules. For example the *Autodesk Creative Suite*, the *Rare Motion Capture Studio*, and the *Unreal* and *Unity* games engines. Using professional techniques acquired through lectures, tutorials, seminars, and industry workshops students will develop a portfolio of industry standard work.

All awards in the program area have a strong emphasis on ensuring the readiness of students to work as part of a team in a games development studio. To ensure that students are ready for this working environment all students on Games Technology awards complete the *Junior, and Senior, Collaborative Games Development and Testing modules*. These modules replicate the collaborative team working setting of a development team. Students will learn to develop their communication skills, as they disseminate information amongst their colleagues and peers. In the process progressing their games design ideas from concept to reality. Students will be required to interact with all team members throughout the development and realisation of their game design. Further, students will be required to communicate through presentations to peers and staff, and through the production of documentation and videos to promote the game.

The computer games industry is a global business worth billions of dollars a year. Graduates will understand this world-wide marketplace, along with the multi-national publishers and developers who produce some of the most successful games. Graduates will have the skills and attributes to contribute to this global trade through employment in either a studio, academia, or through the production of smaller viral games on mobile platforms.

A graduate of a Games Technology award from Staffordshire University will be digitally literate and will be able to develop their portfolio of work throughout their career. The games industry is constantly evolving and lifelong learning is at the heart of every team member in a development studio. Modules on Games Technology awards like Introduction to 3d Modelling, and Games Engines and Physics cultivate a sense of ongoing, critical and reflective learning through up-to-date learning materials and methods including Video Tutorials, asynchronous forum discussion boards, and seminars.

All of the above help to develop the "Three E's" in graduates.

Graduates of courses are employable and ready for work; this can be seen through the previous employment statistics. However, to ensure this is the case we constantly work with employers, studio and industry professionals to ensure the course is as relevant as possible to studios. Graduates are encouraged to be enterprising and entrepreneurial and are encouraged to use their skills to follow their ambitions. With the prominence of mobile, social and viral games, graduates will have the knowledge to set up indie studios and produce independent apps and games. The experience from the Junior, and Senior, Collaborative Games Development and Testing, rapid prototyping and portfolio modules will prepare the student should this be desired.

The awards in this programme have a strong emphasis on a working games studio environment giving the students six weeks in industry required by skillset. The Junior and Senior Collaborative Games Development and Testing modules will combine to make a cross level games studio module and the students will be dedicate one day a week in a studio environment for 24 weeks in their level 5 year and 24 weeks in their level 6 year, producing a total of two published games by the time they graduate.

PROGRAMME OUTCOMES

What will this programme teach me to do? At the end of your studies you should be able to:

Award Specific Outcomes for Undergraduate awards in this Programme BSc [Hons] BEng [Hons] Computer Games Design

<p>Knowledge & Understanding Understand of how established games design techniques and principles of 3D modelling used by others may be used for original production and show a systematic approach to the analysis of graphics in terms of dynamic modelling of 3D images and characters.</p>
<p>Learning Set realistic goals for learning and become a confident independent learner who could impart their knowledge to others</p>
<p>Enquiry Understand of the methods and avenues of enquiry in the field of games design and technology and show a professional approach to research and information gathering.</p>
<p>Analysis Show the ability to analyse a problem through critical thinking and constructive argument backed by data and research. Analyse the effectiveness of techniques and technologies in terms of usefulness and the effectiveness of the way others use technology and techniques for specific production situations.</p>
<p>Problem Solving Identify the problem and use skills of decision making to choose the appropriate method to obtain the best solution and have the ability to discern between a complete and incomplete solution to a technological or theoretical problem</p>
<p>Communication Communicate interpersonally either in the form of written or oral expression in a professional manner to a variety of audiences in order to communicate ideas, problems or solutions</p>
<p>Application Apply critical reasoning and argument to show the ability to apply concepts in different contexts and apply in a practical and flexible manner a workflow pipeline to produce parts or a complete computer games</p>
<p>Reflection Demonstrate the ability to realistically reflect on the quality of their work and put in to place a plan of action to improve upon their work in the future.</p>

MEng Computer Games Design

<p>Knowledge and understanding Learning Enquiry</p>	<p>Demonstrate a critical understanding of the fundamental principles behind computer games design and demonstrate a systematic understanding of knowledge which is at the forefront of professional practice in an area of computer games design</p>
<p>Analysis Problem Solving Application Reflection</p>	<p>A critical understanding of knowledge, together with a practical understanding of how established techniques of research and enquiry are used to create and interpret knowledge within the professional practice of the discipline.</p>
<p>Enquiry Application</p>	<p>A comprehensive understanding and critical evaluation of methodologies and techniques applicable to their own research and, where appropriate, propose new hypotheses/solutions</p>
<p>Learning Reflection Communication</p>	<p>A critical awareness and evaluation of current research, advanced scholarship, contemporary problems and or/new insights, much of which is at, or informed by, the forefront of professional practice in an area of computer games design.</p>

Analysis Problem solving Application	Evaluate complex issues both systematically and creatively, make sound judgments in the absence of complete data, and apply appropriate decision-making in complex and unpredictable situations.
Communication	Communicate your conclusions clearly to specialist and non-specialist audiences.
Reflection	The ability necessary for employment requiring the exercise of initiative and personal responsibility, self-direction and originality in tackling and solving problems, and act autonomously in planning and implementing tasks at a professional level
Learning	The ability to carry out independent learning ability required to advance your knowledge and understanding, and to develop new skills to a high level for continuing professional development.

PROGRAMME STRUCTURE, MODULES AND CREDITS

L E V E L 4	Teaching Block 1	CORE GAME40213 Introduction to 3D Games Engines	CORE GAME40214 Introduction to Games Design	CORE GAME40400 Introduction to 3D Modelling for Games	OPTION
	Teaching Block 2	[30]	[30]	[30]	[30]

L E V E L 5	Teaching Block 1	CONDITIONAL CORE GAME50168 3D Character Modelling for Games	CORE GAME50170 Junior Collaborative Game Development & Testing	CONDITIONAL CORE GAME50186 3D Environment Modelling for Games	OPTION
	Teaching Block 2	OR GAME50185 3D Games Design and Development	[30]	OR GAME50180 Advanced 3D Games Engine and Scripting	[30]

L E V E L 6	Teaching Block 1	CORE GAME60247 Senior Collaborative Games Development & Testing	CORE GAME60193 Individual Games Technology Project	CORE GAME60271 Individual Games Technology Portfolio	OPTION
	Teaching Block 2	[30]	[30]	[30]	[30]

Options [2016-17]

LEVEL 4				
Teaching Block 1		Cats	Teaching Block 2	Cats
GAME40212	Introduction to Animation and Motion Capture [<i>Animation and MOCAP Route</i>]			30
GAME40246	Narratology for Games [<i>Narrative and Audio Route</i>]			30
GAME40361	Introduction to Realism in Games and Militainment [<i>Production Route</i>]			30
GAME40187	Introduction to Texturing for Games			30

LEVEL 5				
Teaching Block 1		Cats	Teaching Block 2	Cats
GAME50356	3D Hard Surface Modelling for Games [<i>3D Modelling Route</i>]			30
GAME50253	Rapid Games Prototyping [<i>Games Scripting Route</i>]			30
GAME50261	Game Interface Design and Implementation [<i>Production Route</i>]			30
GAME50265	Character Animation and Motion Capture [<i>Animation and MOCAP Route</i>]			30

LEVEL 6				
Teaching Block 1		Cats	Teaching Block 2	Cats
GAME60174	Advanced 3D Modelling [<i>3D Modelling Route</i>]			30
GAME60175	Advanced Games Prototyping and AI Scripting [<i>Games Scripting Route</i>]			30
GAME60177	MMOG Design, Communities And Narratology [<i>Narratology Route</i>]			30
GAME60282	Military Games Design, Development & Philosophy [<i>Games Theory Route</i>]			30
GAME60400	Cinematic Animation & Motion Capture [<i>Animation and MOCAP Route</i>]			30

HOW WILL I BE TAUGHT AND ASSESSED?

Teaching and Learning

Level 4 Modules

The strategy for teaching is to formally support the Level 4 students in the form of lectures and tutorials. Often a method of combined lecture/ tutorial is used, where lectures are delivered in a lab alongside tutorial style interaction. Concepts are discussed and then techniques demonstrated and attempted by the students. There is a lot of teaching support at this level and “Traditional Lectures” are kept to a minimum

Learning is primarily achieved during direct contact time with the lecturer. This is designed to ease you into university life and successfully make the transition from schools/college to university. At this Level subject specific skills are learnt in the form of principles and technologies that underpin the subject. Transferable skills in knowledge and understanding are of primary importance at this level to provide a solid foundation for learning at higher levels

Level 5 Modules

The Lecture/Tutorial scheme continues but you are encouraged to seek out your own sources of research material and this is demonstrated in such things as log books. You are expected to engage to a greater extent with resourced based materials such as video tutorials available through the virtual learning environment. You will be offered support in surgery sessions and assignment workshops.

Learning time is split between lectures/ tutorials and your own learning using such things as video tutorials. Subject Specific Skills are learned by applying the principles and technologies from the previous level and building up more advanced knowledge and technical skills. Transferable skills in problem solving and application to real world scenarios are emphasised at this level. Presentation skills and skills at group working are developed and milestones are used to introduce you to working to intermediate deadlines, as you will be expected to do in industry.

Level 6 Modules

You will be given some combined lecture/ tutorials, but the expectation is that you will drive your own learning and the formal teaching element is replaced by tutor support when needed. This support is given by the Project Supervisor and module tutors and you will be guided very much by the assignment criteria for each module. Self-guided study is heavily emphasised

Learning is done mainly outside of the lecture/lab environment and led by the student themselves. By this point in your university career you will have had time to reflect upon your strengths and are encouraged to exploit those strengths in your project choice. Interest and strength in a subject is a very good self-motivator. Subject Specific Skills in applying the more advanced knowledge and technical skills learned at the previous level and applied especially in the Individual Games Technology Portfolio module.

Level 7 Modules

Independent resource based learning where you will work on your own developing personal approaches and strategies to learning [utilising resources]. This approach will enable the building of research skills and individual study approaches and strategies. This will benefit you whilst on the award, and will also be an essential skill for continued lifelong learning;

Independent reading will be pushed through all modules. You will be encouraged to read games research journals and access online material such as that found on GDC, DIGRA, Ludology.org and GamesDev.Net

Practical seminars sessions will allow students to see design challenges in action. Such seminars may

include the recording of game play, heart rate monitoring and facial tracking. These sessions aim to bridge the gap between game construction and research creating primary research for student projects.

Staff-directed Learning will involve formal lectures, tutorials and workshops. Staff will introduce design challenges to spark debate utilising the latest of games design publications. You will be asked to focus on topics utilising independent reading to promote further classroom discussion.

Surgeries will give you the opportunity to receive feedback prior to submission. These sessions will allow staff to assess research sources and student technique encouraging a rigorous approach to the solution of design problems.

Problem based learning will be used in a module to set specific problems for students to solve. To solve these problems you will need to think, and reason towards a good solution. The approach to learning will be used both within groups and individuals;

Supervision all students at the M.Sc. stage of the award write a dissertation, a major factor related to this aspect of learning will be how you develop skills to work independently and be guided by a project supervisor;

Case studies and investigations that replicate development scenarios such as the work on Serious Games. You will be given the opportunity to research the design challenges in serious games and analyse the related research publications.

Seminars during some aspects of the award you will be asked to research topics with others and give a mini seminar. Seminars focus on you analysing existing work and also present the opportunity for you to discuss findings from the Universitys testing lab.

Staffordshire Graduate

In levels 5 and 6 the strategy for learning takes on a realistic twist. You will work across the academic years in a group studio environment for one day a week. The day will start with a ½hr lecturer followed by a ½hr group meeting to set out what is expected in that working day. The day will finish with a ½hr group wash up meeting to monitor what has been achieved that day.

As a Level 5 student you will take on the junior roles within the games studio and will be led by the Level 6 students who take the senior roles. Each group produce one game and you are assigned to the Art Department, Design Department or Engines/Programming Department reflecting the structure of a games company.

As you move from level 5 to level 6 you then progress from being a junior member of a team to a management role as a senior, creating a sense of progression through the company from a junior to a senior role.

Assessment

Level 4 Modules

The assessment strategy is based on what is best to assess the level learning outcomes at Level 4. In general these are in the form of written reports that detail the work done on practical projects. As with the learning strategy the assessment strategy is designed to allow students a smooth transition from school/college to university.

Level 5 Modules

At this level the assessment of students aims to reflect an industrial situation. This still includes written reports and practical work; however at this level you are introduced to being assessed on working to produce log books, working to milestones and self-assessment and peer reflection, which would be encountered in industry. Group work and presentations are also used as assessment methods to replicate what would happen in industry.

Level 6 Modules

Assessment at this level is dominated by Individual Games Technology Project and The Individual Games Technology Portfolio modules. You are assessed on your ability to take charge, plan, manage, and produce work to your own brief. You are also assessed on your ability to demonstrate reflection on the body of work you have embarked upon and demonstrate a range of life experiences to facilitate life-long learning.

Level 7 Modules

Coursework assignments: Modules focusing on design issues will feature coursework assessment. You will research design challenges and write essays to solve and discuss solutions appropriate solutions. This method of assessment will encourage academic writing and push you towards paper publishing.

Presentations: During the process of games development you will present your progress on game construction allowing for summative and formative feedback.

Demonstrations: You will demonstrate the workings of games development projects and academic theories to academic and publishers.

Milestones: will help to assess your progression throughout a module. You will typically involve a small demonstration or online submission of work.

Oral viva: all students are required to do a viva presentation of their dissertation work at the end of the award. This typically involves a brief presentation, in depth discussion, questions on their work, and a demonstration of an artefact created

ADDITIONAL INFORMATION

Entry Requirements [including IELTS score]

A student who has achieved an HND may join with advanced standing this will be reviewed by the Award Manager on an individual basis to determine the suitable entry level to the award. A student with an outstanding, distinctive profile at HND may exceptionally be considered for direct entry to level 6.

IELTS 6.0

What qualifications would I need to join this programme?

The entry requirements for the award are normally:

For details of UCAS tariff points please see the current online prospectus at:

<http://www.staffs.ac.uk/undergraduate/>

or

A pass in a recognised Access to Higher Education course or a Foundation Year [including the Level 3 of Computer Games Design [Extended]].

Mode of Study

All of the awards can be studied part time. The Part Time Studies Award leader will discuss the needs and the pace at which each Part Time student wishes to study in order to prepare

an individual timetable for each student.

The BSc [Hons] Computer Games Design award can be studied by Distance Learning part time. The Distance Learning Award leader will discuss the needs and the pace at which each Distance Learning student wishes to study in order to prepare an individual timetable for each student. Please see the Distance Learning Programme Specification Document and Student Handbook

Disability Statement

Staffordshire University operates a policy of inclusive teaching and learning to ensure that all students have an equal opportunity to fulfil their educational potential. Details about how to apply to have your needs assessed can be found at:

http://www.staffs.ac.uk/courses_and_study/disabled_students/index.jsp

AWARD SPECIFIC INFORMATION

If a module has more than one assessed components, then the student must achieve a minimum mark of 30 % in each component and an aggregate mark of 40% to pass the module.

The student who enter at Level 3, must pass [including compensation] the Level 3 of the awards in its entirety to progress

The Level 5 Junior Collaborative Games Development and Testing module cannot be compensated. If students fail this module they can only retake with attendance. They may not proceed to the Level 6 Senior Collaborative Games Development and Testing module until they have passed Level 5 Junior Collaborative Games Development and Testing.

The placement year is considered as either a pass or fail. With the pass contributing to the award of Sandwich degree. There are no specific credits at any level allocated to the placement year.

It is prohibited for the 30 credits of the Individual Games Technology Project or the 30 of the Individual Games Technology Portfolio to be compensated.

If a total of 300 Credits are achieved over Levels 4, 5 and 6 instead of the required 360 credits for the Honours Degree, then it is assumed that the student has not fully demonstrated the qualities of Staffordshire Graduate. In this case the student will be offered a Non-Honours Degree.

It is prohibited to change to this award after week 4

Further information about the award can be found in the relevant Student Handbook and on the University Website. This includes information about optional modules, learning outcomes at levels below honours, student support, and academic regulations.

The Staffordshire Graduate

The following table maps the awards modules against the Staffordshire Graduate Characteristics

AWARD TITLE: Games Technology Suite of Awards		
Characteristic	Award Module[s] including level and number of credits	Method of Assessment
Work-ready and employable	Junior Collaborative Games Development and Testing [L5 30 Credits]	Students will work across the academic years in a group studio environment for one day a week. The day will start with a ½hr lecturer followed by a ½hr group meeting to set out what is expected in that working day. The day will finish with a ½hr group wash up meeting to monitor what has been achieved that day. The Level 5 students take on the junior roles within the games studio and they will be led by the Level 6 students who take the senior roles. Each group produce one game and students are assigned to the Art Department, Design Department or Engines/Programming Department reflecting the structure of a games company.
	Senior Collaborative Games Development and Testing [L6 30 Credits]	As the student moves from level 5 to level 6 they then progress from being a junior member of a team to a management role as a senior, creating a sense of progression through the company from a junior to a senior role.
Understanding of enterprise and entrepreneurship	Junior Collaborative Games Development and Testing [L5 30 Credits]	Students will be assessed on how they apply the games marketing skills to the marketing of their game.
	Senior Collaborative Games Development and Testing [L6 30 Credits]	Students will be assessed on their ability to understand the process of bringing their game to market and releasing it to a global games distribution network
Understanding of global issues and their place in the global economy	Junior Collaborative Games Development and Testing [L5 30 Credits]	Students will be assessed on their ability to understand that the games industry is a global market and to that end design a game that does not alienate parts of the global market.
	Introduction to Games Design [L4 30 Credits]	Students will be assessed on their ability to demonstrate what they have learnt about games, genres and the social context of games globally
	Introduction To Realism In Games And Militainment [L4 30 Credits]	Students will be assessed on their ability to understand industry requirements for creating a suitable realistic game and research market effectiveness.
Communication skills	Junior Collaborative Games Development and Testing [L5 30 Credits]	Formative assessment by Tutors

	Senior Collaborative Games Development and Testing [L6 30 Credits]	Formative assessment by Tutors
	Introduction to Games Design [L4 30 Credits]	Students will be assessed on their ability to communicate the principles of genre and competitive analysis
	Introduction To 3D Modelling For Games [L4 30 Credits]	Students will be assessed on their ability to communicate current industry technologies and workflows used in the production of the environment.
Presentation skills	Junior Collaborative Games Development and Testing [L5 30 Credits]	Junior members of the team will be expected to contribute to the presentation of the final game in a way which demonstrates the qualities of their product in the best light.
	Senior Collaborative Games Development and Testing [L6 30 Credits]	Senior members would be expected to present their vision not only to the junior members of the team but also to the executive producers.
The ability to interact confidently with colleagues	Junior Collaborative Games Development and Testing [L5 30 Credits]	This will be observed formatively by tutors
	Senior Collaborative Games Development and Testing [L6 30 Credits]	This will be observed formatively by tutors
Independence of thought	Individual Games Technology Project [L6 30 Credits]	Individual project demonstrating the students' ability to study and work independently
	Introduction To 3D Modelling For Games [L4 30 Credits]	Students will be assessed on their ability to reflect upon suitability of the environment for the chosen game engine through comparison with professional works and critically evaluate the piece and determine improvements.
	3D Character Modelling For Games [L5 30 Credits]	Students will be assessed on their ability to reflect upon the effectiveness of different approaches used in 3d character modelling.
	Advanced 3d Games Engines And Scripting [L5 30 Credits]	Students will be assessed on their ability to reflect on the success of the creation process.
Skills of team working	Junior Collaborative Games Development and Testing [L5 30 Credits]	Formative assessment by Students on the Senior Collaborative Games Development and Testing module
	Senior Collaborative Games Development and Testing [L6 30 Credits]	Tutors will monitor the success of students on this module in their ability to work in a team as a senior member in a managing or guiding role

Ability to carry out inquiry-based learning and critical analysis	Individual Games Technology Project [L6 30 Credits]	The project will assess the ability of the student to choose, learn and be personally critical of the work they have undertaken and produced.
	Introduction to Games Design [L4 30 Credits]	Students will be assessed on their ability to evaluate and interpret the principles of character design in regards to level design.
	Introduction To 3D Modelling For Games [L4 30 Credits]	This module will assess the ability of students to apply appropriate techniques to create and modify 3D game assets by evaluating and applying a variety of industry production techniques.
	3D Character Modelling For Games [L5 30 Credits]	This module will assess the ability of students to analyse the effectiveness of 3D tools and create a viable production workflow using sound academic and industrial methods.
Skills of problem solving and creation of opportunities	Junior Collaborative Games Development and Testing [L5 30 Credits]	This will assess the ability of the students to problem solve a series of small problems undertaken as a part of the task of creating a publishable game
	Senior Collaborative Games Development and Testing [L6 30 Credits]	This module will assess the ability of students to problem solve large and complex problems to do with the management, artistic and technical direction of a game created by a team.
	Introduction To 3D Games Engines [L4 30 Credits]	Students will be assessed on their ability to use a broad range of functions within a games engine to create a multiplayer and single player game levels.
Technologically, digitally and information literate	Introduction To 3D Modelling For Games [L4 30 Credits]	These modules all at level 4 form the bedrock of the different technological and digital skills required. They also assess a breath of skills in games technology required to inform and support the modules at a higher level.
	Introduction To 3D Games Engines [L4 30 Credits]	
	Introduction To Games Design [L4 30 Credits]	
	Introduction To Realism in Games and Militainment [L4 30 Credits]	
Able to apply Staffordshire Graduate attributes to a range of life experiences to facilitate lifelong learning	Individual Games Technology Portfolio	Portfolio of work demonstrating the students' ability to network with industry and develop industry facing examples of their work