

PROGRAMME SPECIFICATION

Awarding body/institution	Glyndŵr University
Teaching institution (if different from above)	Glyndŵr University
Details of accreditation by a professional, statutory or regulatory body (including link to relevant website)	N/A
What type of accreditation does this programme lead to?	N/A
Is accreditation in some way dependent on choices made by students?	N/A
Final award/s available eg BSc/DipHe/CertHE	BSc (Hons) Computer Game Development BSc (Ord) Computer Game Development Diploma of Higher Education in Computer Game Development Certificate of Higher Education in Computer Game Development
Award title	BSc (Hons) Computer Game Development
JACS 2 code	G450
UCAS code (to be completed by admissions)	G451
Relevant QAA subject benchmark statement/s	Computing
Other external and internal reference points used to inform the programme outcomes	
Mode/s of study (p/t, f/t, distance learning)	Full time/Part time
Language of study	English with a proportion being available in Welsh
Date at which the programme specification was written or revised	April 2012 Updated August 2012

Criteria for admission to the programme

In accordance with the University's admission policy the programme seeks to offer opportunities to anyone able to benefit from this programme of study regardless of age, gender, ethnicity, social or educational background.

Applicants will normally be expected to hold five GCSE subjects including English or Welsh and Mathematics at Grade C or above (or equivalent O Levels or CSE grades) and in addition students will normally be expected to have one of the following qualifications at Level 3:

- Passes in at least two GCE (A2) A levels
- Advanced Vocational Certificate double award
- An Advanced GNVQ, BTEC National Certificate or Diploma
- Scottish Highers or Irish Leaving Certificate Higher Level
- International Baccalaureate or equivalent European or International qualifications or their equivalencies
- Kite marked Access to HE Certificate
- Other qualifications equivalent to the above.

The UCAS points tariff for entry with the relevant qualifications above will be 240 points.

Accreditation of Prior Learning (APL) for this programme is in accordance with University policy.

Vocational/Professional Skills

A specific requirement for admission is that entrants will be 'computer literate' (as defined as in the National Curriculum). Applicants who have recent academic qualifications which meet this, will be able to demonstrate their ability through achievement of these qualifications. In addition, those applicants without recent academic qualifications are encouraged to apply (as mentioned previously), but will be required to present evidence of computer literacy for example, through achievement of vocational qualifications or through evidence of relevant industrial experience.

Widening Participation

Applicants without recent qualifications but who can demonstrate significant recent and relevant experience for example, through employment and membership of a professional body are also encouraged to apply. An interview will be required for non-standard applicants, as determined by the relevant admissions officer.

With respect to arrangements for the admission of students with disabilities and / or specific learning differences, the University has embraced the spirit and content of the Special Education Needs and Disability Act (SENDA) documentation. All Computing programmes have a clear and effective strategy for ensuring that access on to programmes is as wide as possible for students with declared disabilities. The process is officially initiated by application, although in many cases the discussion / dialogue commences with the first enquiry at visit days, prior to application.

Following application to the programme, a meeting with the applicant, Programme Leader, Student Support Services and the Disability Advisor for the University is convened. This allows the students' needs and the available facilities to be evaluated, and a 'support plan'

is then developed and agreed by all parties. This means that support can be available immediately on enrolment. The support plan is monitored and modified as required throughout the period of study.

International/EU Students

In addition to meeting the academic requirements, applicants whose first language is not English will be required to provide evidence of competence in spoken and written English, as well as evidence of appropriate reading skills. Normally this will equate to an IELTS score of 6.0 or a TOEFL score of 550.

Equivalent qualifications will also be considered and evaluated on an individual basis as appropriate.

Aims of the programme

The programme will provide students with a comprehensive education, skills and learning experience in all aspects of computer games design, programming and related technologies.

The specific aims of the programme are as follows:

1. To provide students with an understanding of current and developing computer games technologies.
2. To facilitate students in the development of their expertise and interest in topic areas which will have direct and complementary relevance to gaining employment.
3. To support and guide students in becoming autonomous learners.
4. To provide students with an understanding of current computer games development research issues.
5. To develop students' analytical, creative, problem-solving and evaluation skills.
6. To provide a platform for career development, innovation and/or further postgraduate study.

BSc (Hons) Computer Game Development meets the QAA benchmark statements for the subject of Computing, and has also addressed the guidance provided by IGDA and Skillset. In particular, the programme aims to ensure that students have considered all of the elements appropriate to Computer Game Development that are included in the "Core Topics" identified by IGDA.

Distinctive features of the programme

BSc (Hons) Computer Game Development is designed to offer a high quality degree for undergraduates interested in the development of computer games. The course provides a strong computing/technology base coupled with creative work. The computer games industry requires students to work as part of a multi-skilled team to produce high quality, innovative and exciting products to tight deadlines and these skills will be an important part of the student experience. The programme encourages interdisciplinary collaboration, for example BSc (Hons) Computer Game Development students will throughout their study be able to interact with fellow students from the various subject backgrounds (Computing, Art & Design and Audio).

The need for such multidisciplinaryity is highlighted by Skillset in *Creating the Future*. This

acknowledges the growth in the UK industrial sector, and anticipates further expansion and job opportunities over the next five years as new platforms and technologies continue to emerge. It further predicts that interactive media and computer games skills and techniques will also become more pervasive in all areas of working and daily life.

The programme is distinctive in that it provides a strong conceptual and methodological grounding and seeks to develop a rich and up-to-date set of practices and techniques which students can exploit in state-of the art computer game software design and implementation.

Programme structures and requirements, levels, modules, credits and awards

Please see pages 17-19 for programmes structures for full-time and part-time students.

Part-Time Programme Structure

The programme will also be delivered in a part-time format, which will lead to the completion of either a BSc (Hons) Computer Game Development or BSc (Ord) Computer Game Development.

In addition, the programme permits students to study in a mixed mode of attendance. For example, a student may enter as a full-time student and due to personal circumstances, may transfer to a part-time mode of study for the remainder of the programme. The Programme Team will counsel, as appropriate, any student who seeks to change their mode of activity after enrolment to ensure that their transition does not have a detrimental impact on their studies.

The standard academic year is divided into two equal semesters with part-time students studying two modules per semester. Completion of four modules per year by part-time study offers the expectation of the completion of an ordinary degree programme in four years and an honours degree in five years. The Academic Regulations state that registration for a part-time programme of study must be completed within a maximum of eight years. In addition, as the diagram below illustrates, the part-time structure of the programme requires a student to study at different levels in the same semester and as such takes more than one year to complete a level of study. Due care and attention will be made to ensure that such students are supported appropriately by the Programme Team. Student progression and specification of modules will be managed in accordance with the Academic Regulations for Full Time and Part Time study.

In the part-time BSc (Ord) Computer Game Development programme, students complete modules to the value of 300 credits over four academic years:

- Year 1 to 3 = 80 credits per year
- Year 4 = 60 credits per year

The part-time BSc (Hons) Computer Game Development programme allows students to complete modules to the value of 360 credits over five academic years, including 40 credits in a final year Team Project:

- Year 1 to 3 = 80 credits per year
- Year 4 and 5 = 60 credits

Students wishing to pursue less than four modules per year will be counselled on their expectations. Part-time study will require attendance at the University at least one day per

week.

Level 4

By the end of the Level, they will also be able to maintain log books and write documents concisely, make use of a range of resources in support of self-directed learning, and seek and make use of feedback. Students will have also developed their understanding of personal responsibility.

Level 5

By the end of the Level they will also be able to work effectively both independently and within a group, make reasonable selection of the appropriate tools for the job, recognise and assess alternative options. They will also be able to demonstrate a critical understanding of the application of principles in an employment context and be able to embrace new competencies that will ensure they can assume significant responsibility and reach appropriate decisions.

Level 6

By the end of the Level students will also be able to produce and present detailed and coherent reports which draw on an effective analysis of published research and professional practice. Students will also be able to review, consolidate and extend their knowledge to analyse situations using appropriate methods, and to make judgements about the limitations of their own knowledge, through the analysis and evaluation of their own and others practice.

Intended learning outcomes of the programme

On completion of the programme, students will:

A) Knowledge and understanding:

- A1. Be aware of current and developing principles and practices within computer games design and development.
- A2. Understand ethical, legal and professional responsibilities of new media professionals.
- A3. Have been exposed to and applied a range of tools and techniques currently being used in the development of computer games.
- A4. Be able to apply theories of graphical environment designing, software interface development, interactive narrative and story development, market analysis and its role in computer game design and development.
- A5. Be able to discuss current issues in the relevant aspects of computer games development.
- A6. Design and develop two-dimensional and three-dimensional animations
- A7. Be able to review the theoretical and conceptual frameworks of software and computer game development.
- A8. Be able to review the principles and methodologies of software and computer game development.
- A9. Be able to select appropriate methodologies in the production of two-dimensional and three dimensional animations.
- A10. Be able to explain the core theories of modelling for 2D and 3D graphics.
- A11. Be able to characterise the core principles of the object oriented approach.
- A12. Be able to describe, at various levels of abstraction, structured. approaches to system modelling, development and management.

B) Intellectual skills:

- B1. Apply the concepts, principles, theories and practices underpinning computing as an academic discipline.
- B2. Identify, formulate and apply solutions to a diverse range of computer game problems.
- B3. Design, develop, prototype and evaluate a computer game as part of a team.
- B4. Utilise primary methods of research.
- B5. Appraise different artificial intelligence techniques and their relevance for a particular game solution.
- B6. Make informed decisions and produce innovative plans and solutions;
- B7. Apply structured and formal design techniques in software engineering and system specification.
- B8. Understand and apply principles of computer game design, story development, production management and group work to project work.

C) Subject and other skills:

- C1. Apply desktop applications to enhance problem solving efficiency and professionalism.
- C2. Operate computing equipment effectively, recognising its logical and physical properties, capabilities and limitations.
- C3. Apply project management skills to enhance problem solving efficiency and effectiveness.
- C4. Use the principles of games development from design to implementation through the use of a commercial game engine.
- C5. Use appropriate tools in the construction and documentation of game software.
- C6. Deploy effectively the tools used for the construction and documentation of computer applications.

D) Professional Skills, Employability Skills and abilities:

- D1: Make effective use of Information Technology for a variety of purposes.
- D2: Communicate effectively using a range of media.
- D3: Work effectively as part of a team or as a team leader organising, planning and managing team work.
- D4: Manage self and time.
- D5: Reflect on personal performance and formulate action plans.
- D6: Negotiate, discuss and formulate valid arguments.
- D7: Think innovatively and deal with open ended problems and situations.
- D8: Integrate knowledge and concepts in the justification of a case.
- D9: Apply professional standards.
- D10: Write technical reports and academic papers.
- D11: Learn independently.
- D12: Make high level decisions and take responsibility for actions.

CURRICULUM MATRICES demonstrating how the overall programme outcomes are achieved and where skills are developed and assessed within individual modules.

A) Knowledge and Understanding

Level	Module Title	Core/ Option	A 1	A 2	A 3	A 4	A 5	A 6	A 7	A 8	A 9	A 10	A 11	A 12
Lev 4	<i>Personal Development & IT Skills</i>	C	*	*		*	*		*					*
	<i>Digital Media Principles</i>	C	*			*		*	*					*
	<i>Introduction to Design: Ideas & Concepts</i>	C	*			*					*	*		*
	<i>Introduction to Digital Audio</i>	C	*	*	*		*		*			*		
	<i>Game Platforms</i>	C			*		*		*	*				
	<i>Software Methods & Programming</i>	C	*								*		*	*
Lev 5	<i>Module Title</i>	<i>Core/ Option</i>	<i>A 1</i>	<i>A 2</i>	<i>A 3</i>	<i>A 4</i>	<i>A 5</i>	<i>A 6</i>	<i>A 7</i>	<i>A 8</i>	<i>A 9</i>	<i>A 10</i>	<i>A 11</i>	<i>A 12</i>
	<i>Personal Development & Professional Issues</i>	C	*	*		*			*		*		*	*
	<i>3D Modelling & Animation</i>	C	*			*			*				*	
	<i>Game Narratives and Characterisation</i>	C	*			*					*			*
	<i>Audio Technology for Games</i>	C	*		*		*		*					
	<i>Internet & Mobile Application Development</i>	C		*	*			*	*	*	*	*	*	
	<i>Game Design & Development</i>	C	*		*	*								*
Lev 6	<i>Module Title</i>	<i>Core/ Option</i>	<i>A 1</i>	<i>A 2</i>	<i>A 3</i>	<i>A 4</i>	<i>A 5</i>	<i>A 6</i>	<i>A 7</i>	<i>A 8</i>	<i>A 9</i>	<i>A 10</i>	<i>A 11</i>	<i>A 12</i>
	<i>Team Project</i>	C	*			*			*		*		*	*
	<i>Advanced 3D Modelling & Animation for Games</i>	C	*	*		*			*				*	
	<i>AI Systems</i>	C	*		*	*					*			*
	<i>Mobile Game Development</i>	C	*				*		*					
	<i>Multiplayer Game Design & Development</i>	C		*	*			*	*	*	*	*	*	

B) Intellectual Skills

Level	Module Title	Core/ Option	B 1	B 2	B 3	B 4	B 5	B 6	B 7	B 8
Lev 4	<i>Personal Development & IT Skills</i>	C	*			*			*	*
	<i>Digital Media Principles</i>	C	*	*		*			*	
	<i>Introduction to Design: Ideas & Concepts</i>	C	*			*				*
	<i>Introduction to Digital Audio</i>	C	*		*		*		*	
	<i>Game Platforms</i>	C		*				*	*	
	<i>Software Methods & Programming</i>	C	*			*	*			*
Lev 5	<i>Module Title</i>	<i>Core/ Option</i>	<i>B 1</i>	<i>B 2</i>	<i>B 3</i>	<i>B 4</i>	<i>B 5</i>	<i>B 6</i>	<i>B 7</i>	<i>B 8</i>
	<i>Personal Development & Professional Issues</i>	C	*	*		*			*	*
	<i>3D Modelling & Animation</i>	C	*			*			*	
	<i>Game Narratives and Characterisation</i>	C	*			*				*
	<i>Audio Technology for Games</i>	C	*		*		*		*	
	<i>Game Design & Development</i>	C		*	*			*	*	*
	<i>Internet & Mobile Application Development</i>	C		*	*			*	*	
Lev 6	<i>Module Title</i>	<i>Core/ Option</i>	<i>B 1</i>	<i>B 2</i>	<i>B 3</i>	<i>B 4</i>	<i>B 5</i>	<i>B 6</i>	<i>B 7</i>	<i>B 8</i>
	<i>Team Project</i>	C	*			*			*	*
	<i>Advanced 3D Modelling & Animation for Games</i>	C	*	*		*			*	
	<i>AI Systems</i>	C	*		*	*	*			*
	<i>Mobile Game Development</i>	C	*				*		*	
	<i>Multiplayer Game Design & Development</i>	C		*	*			*	*	

C) Subject and other skills

Level	Module Title	Core/ Option	C 1	C 2	C 3	C 4	C 5	C 6
Lev 4	<i>Personal Development & IT Skills</i>	C	*			*		
	<i>Digital Media Principles</i>	C	*	*		*		
	<i>Introduction to Design: Ideas & Concepts</i>	C	*			*		
	<i>Introduction to Digital Audio</i>	C	*		*		*	
	<i>Game Platforms</i>	C		*				*
	<i>Software Methods & Programming</i>	C	*			*	*	
Lev 5	<i>Module Title</i>	<i>Core/ Option</i>	<i>C 1</i>	<i>C 2</i>	<i>C 3</i>	<i>C 4</i>	<i>C 5</i>	<i>C 6</i>
	<i>Personal Development & Professional Issues</i>	C	*	*		*		
	<i>3D Modelling & Animation</i>	C	*			*		
	<i>Game Narratives and Characterisation</i>	C	*			*		
	<i>Audio Technology for Games</i>	C	*		*		*	
	<i>Internet & Mobile Application Development</i>	C		*	*			*
	<i>Game Design & Development</i>	C	*		*	*		
Lev 6	<i>Module Title</i>	<i>Core/ Option</i>	<i>C 1</i>	<i>C 2</i>	<i>C 3</i>	<i>C 4</i>	<i>C 5</i>	<i>C 6</i>
	<i>Team Project</i>	C	*			*		
	<i>Advanced 3D Modelling & Animation for Games</i>	C	*	*		*		
	<i>AI Systems</i>	C	*		*	*		
	<i>Mobile Game Development</i>	C	*				*	
	<i>Multiplayer Game Design & Development</i>	C		*	*			*

D) Professional Skills, Employability Skills and abilities

Level	Module Title	Core/ Option	D 1	D 2	D 3	D 4	D 5	D 6	D 7	D 8	D 9	D 10	D 11	D 12
Lev 4	<i>Personal Development & IT Skills</i>	C	*			*			*		*		*	*
	<i>Digital Media Principles</i>	C	*	*		*			*				*	
	<i>Introduction to Design: Ideas & Concepts</i>	C	*			*					*			*
	<i>Introduction to Digital Audio</i>	C	*		*		*		*			*		
	<i>Game Platforms</i>	C		*				*	*	*	*	*	*	
	<i>Software Methods & Programming</i>	C	*			*	*							*
Lev 5	<i>Module Title</i>	<i>Core/ Option</i>	<i>D 1</i>	<i>D 2</i>	<i>D 3</i>	<i>D 4</i>	<i>D 5</i>	<i>D 6</i>	<i>D 7</i>	<i>D 8</i>	<i>D 9</i>	<i>D 10</i>	<i>D 11</i>	<i>D 12</i>
	<i>Personal Development & Professional Issues</i>	C	*	*		*			*		*		*	*
	<i>3D Modelling & Animation</i>	C	*			*			*				*	
	<i>Game Narratives and Characterisation</i>	C	*			*					*			*
	<i>Audio Technology for Games</i>	C	*		*		*		*					
	<i>Internet & Mobile Application Development</i>	C		*	*			*	*	*	*	*	*	
	<i>Game Design & Development</i>	C	*		*	*								*
Lev 6	<i>Module Title</i>	<i>Core/ Option</i>	<i>D 1</i>	<i>D 2</i>	<i>D 3</i>	<i>D 4</i>	<i>D 5</i>	<i>D 6</i>	<i>D 7</i>	<i>D 8</i>	<i>D 9</i>	<i>D 10</i>	<i>D 11</i>	<i>D 12</i>
	<i>Team Project</i>	C	*			*			*		*		*	*
	<i>Advanced 3D Modelling & Animation for Games</i>	C	*	*		*			*				*	
	<i>AI Systems</i>	C	*		*	*					*			*
	<i>Mobile Game Development</i>	C	*				*		*					
	<i>Multiplayer Game Design & Development</i>	C		*	*			*	*	*	*	*	*	

Learning and teaching strategy used to enable outcomes to be achieved and demonstrated

This is a modular credit based programme in which modules are delivered through a balanced mix of lectures and tutorials/workshops.

Lectures are used to deliver the basic subject framework and underpin knowledge, and will be used to introduce and explain major themes, theories and techniques.

Tutorials are used to follow up specific problems, questions and issues in greater depth. Extensive use of case studies, discussion and practical exercises will allow for the subject underpinning of the lectures to be further developed and understood via the tutorials.

At level 4 the emphasis is on the establishment of a skills and knowledge base to engender in students a sound understanding of basic principles, techniques and technologies. This is primarily achieved by the inclusion of modules specifically designed to cover the key areas of study. Curriculum delivery will be implemented largely by lectures, tutorials, seminars, videos, demonstrations, practical work and assignments. There is a small balance in favour of theoretical rather than practical activities and group work is introduced.

At level 5 the emphasis is on a widening and deepening of the knowledge base and the development of analytical and evaluative skills. New topic areas are introduced via specific modules and a higher content of practical work is featured via the design activities and assignments. The balance now is more in favour of practical rather than theoretical work with a greater emphasis being given to design orientated content. Group activities are expanded and more use is made of case studies, informal discussions and guest lectures.

At level 6 the emphasis is on the development of conceptual understanding and analysis and its application to advanced disciplines, problem solving, and design management activities. Specialist topic areas are introduced via specific modules and student managed learning environments are prevalent via project and assignment work. The balance moves further in favour of practical rather than theoretical activity and group work is further expanded.

At all levels on-line targeted and specific additional learning support materials and discussion forums will be available to students through Moodle and a programme of guest speakers will be in place to introduce leading edge, specialist topics and encourage interaction with the profession.

Welsh Medium

In line with the University's Welsh Language Policy, students are entitled to submit assessments in Welsh.

Additionally, currently, 4 out of the 17 (23% approx) total modules on the programme can be delivered in Welsh. We hope to expand this over the coming academic year.

Assessment strategy used to enable outcomes to be achieved and demonstrated

The Programme Team has selected a variety of assessment techniques appropriate to each module to ensure that students have a rich learning experience. Further evidence of the range of assessment which the team has developed to evaluate the performance of students

at each level of study is available in the indicative assessment included in the module specifications.

A) Knowledge and Understanding

Core knowledge and understanding is achieved through the use of a range of appropriate teaching methods based on the philosophy that students learn through active participation, these methods will incorporate, whenever possible, student-oriented activities and practical work.

Students are motivated by being given a specific task with an achievable outcome, ranging from completion of a small tutorial exercise to a full-scale team project at level 6. Acquisition of programme outcomes are done through a combination of lectures, tutorials, workshop, laboratory work, seminars, coursework (both individual and team work), project and guided independent study.

Assessment: Knowledge and understanding is progressively assessed via individual and team coursework along with the demonstration of competence in the delivery of practical work, and projects.

B) Intellectual Skills

Logical thinking is developed throughout the course as it is essential to the understanding and application of the conceptual techniques studied.

Problem analysis, formulation and solving are introduced in lectures and further developed through problem sheets during classes and in practical work.

The ability to present arguments is developed both verbally in classes with the module tutor, and in written form, including classwork, practical reports and assignments.

Assessment: Intellectual skills are assessed formatively through classwork and practical exercises, and summatively in practical reports and assignments.

C) Subject and other Skills

Subject specific skills are developed through a mixture of small group tutorials, workshops, team working and course work assignments.

Assessment: Subject specific skills are assessed by defined assignments consisting of written reports and the practical development of solutions. The final year project will ultimately demonstrate the student's ability in this area.

D) Professional Skills, Employability Skills and Abilities

Professional and Employability skills are reinforced by the use of workshop-based sessions at each level, and the production of a portfolio of game related projects. The various development oriented modules at levels 4 and 5 provide relevant practice in industry standard languages. The final year Team Project provides an opportunity for students to apply all the techniques that they have acquired to a large-scale development.

Personal Development and IT skills, along with the more formal presentation-type communication skills are developed during a number of modules. Written communication skills are acquired and developed through the writing of formal reports and essays.

Problem solving is a key aspect of the modules and the computer laboratory work at each level. Information technology skills are developed throughout the programme.

The team intends to particularly encourage students to take up extra curricular opportunities offered by the University's Second Language Learning Centre to develop skills in the Welsh language. It is expected that a graduate who is able to design and create games in Welsh would have unique employment opportunities, particularly as media industries are a key focus of Welsh Assembly Government economic development policies. The concept of being able to study a second language as an extra-curricular activity will also be attractive to EU students.

Assessment: These skills are assessed via laboratory sessions, workshops, submission of reports, demonstration of systems and individual assignments. The skills development is assessed in all levels of the programme as part of the coursework, and the final Team Project.

Assessment regulations that apply to the programme

The University's Bachelor Degrees, Diplomas and Certificates and Foundation Degrees regulations will apply to this programme.

Programme Management

Although the programme is based in the Department of Computing, it consists of members from other Departments and the Programme Team is well aware of the importance of ensuring that the interdisciplinary nature of the programme is managed effectively. This will be assured primarily through regular formal Programme Team meetings where all members of the team will have the opportunity to discuss key operational issues. Formal minutes of the meetings will be kept and all actions tracked appropriately.

In addition, Computing provides administrative support, a focus for student interaction, a source of readily accessible information, and ample opportunities for contact between the Programme Team and students.

Programme Management is achieved through a variety of feedback, monitoring, and qualitative procedures facilitated by the Institute and the Academic Area.

The Programme Leader holds the primary responsibility for the day-to-day maintenance and organisation of the programme.

The Programme Leader will normally be assisted by a Programme Team consisting of Year Tutors to monitor and support defined cohorts of students, Module Leaders who are responsible for the everyday management and organisation of their module together with the delivery of the syllabus, and Personal Tutors who provide pastoral and first-line support for students.

Programme Team Meetings are held at least once per semester, and allow key discussion and decisions to be democratically made amongst the members of the Programme Team. These meetings are normally chaired by the Programme Leader. Key decisions and feedback will then be relayed and presented to the relevant University Committees and Academic Heads of Departments.

All staff are aware that the Programme Leader must be informed of any urgent issues at the earliest possible opportunity via the most convenient formal or informal channel. This allows quick reaction and response to important matters as they arise.

Maintaining Academic Standards

The maintenance of academic standards is ensured through University quality procedures such as Annual Monitoring Review and by the regular visits of, and consultation with, the External Examiner.

The Annual Monitoring Review is a crucial element of the University's quality assurance and enhancement mechanisms. Annual monitoring of the programme ensures that learning aims and outcomes are being met, and that the curriculum and assessment strategy continue to be effective along with due consideration of student feedback allowing relevant action planning to take place. The whole Programme Team will engage in the AMR process.

Staff Development is viewed as an important area of support for the programme. For example, in Computing all staff participate in a Peer Observation of Teaching exercise at least once a semester. This is an internal quality procedure for sharing and enhancing teaching practice through the process of peer observation and discussion. The purpose of the scheme is to provide opportunities for individuals to reflect on their own teaching and professional development and to stimulate discussion about improving student learning. Peer observation is a collegial process, valuing professionalism, respect and trust. It is grounded in the principle that support, encouragement and questioning by others can stimulate and accelerate reflection. It also provides opportunities for reciprocal learning, in that the observer often learns as much or more than the person being observed.

Particular support for learning

Student Support, Feedback and Interaction with Programme

Keeping students informed and gaining their feedback upon the development and implementation of the programme is vital to the currency and health of any successful provision. In particular, quantitative student feedback is acquired and analysed through the Student Evaluation of Modules (SEMs) procedures, which allows feedback upon each individual module within the programme. Qualitatively, feedback is also collected in Staff Student Consultative Committees (SSCC) which provide an independently chaired open forum for students to express their views and opinions. Such committee meetings are attended by the relevant Student Representatives and ensure an adequate and effective opportunity for discussion between students and staff, in a context that allows wide student participation and to provide a forum for constructive discussion of the programme or scheme in general terms, of the demands of the programme or scheme on students, and of possible developments.

Students will receive feedback, normally within a maximum of three weeks, on both formative and summative elements of their progression on the programme. This will be provided formally in line with University procedures and be facilitated by the assessment proforma and by other suitable communication media, such as email or telephone.

The Programme Team adopts an "Open-Door" Policy, meaning that when staff are in their office, and available for consultation without appointment, they will keep their door open. Students are also able to book appointments to meet with staff. In addition students are allocated a Personal Tutor, who can provide pastoral support, and this support is subsidised by the inclusion of Year Tutors and the Programme Leader who are also contactable by

arrangement. Remote support is also provided by the use of email, telephone, online conferencing, VLE and video conferencing facilities.

In addition, students have access to a wide range of centralised University support such as Student Services who offer a range of assistance/advice for students, some of which are shown below:

- Student grants/loans
- Other financial guidance/assistance
- Counselling
- Assistance (in many forms) for disabled students, including making the programme team aware of a particular student's special needs

The Careers Department offer all students assistance with the following:

- Help in finding suitable placements
- Help in finding part time employment
- General careers advice
- Help with CVs
- Help in finding permanent employment upon completion of course

Information Services also give guidance for or provide:

- Location of specific books, texts, journals etc
- IT assistance
- 'How to Study' tutorials
- Induction programme, relating to Information Services facilities

Other services available to students include childcare facilities, healthcare provision, the Student Guild and practical services such as scanning, photocopying and access to e-learning facilities.

Personal Development Planning

Personal Development Planning (PDP) is defined as 'a structured and supported process undertaken by an individual to reflect upon their own learning, performance and / or achievement and to plan for their personal, educational and career development.'

PDP embraces a range of approaches to learning that connect planning (an individual's goals and intentions for learning or achievement), doing (aligning actions to intentions), recording (thoughts, ideas, experiences, in order to understand and evidence the process and results of learning) and reflection (reviewing and evaluating experiences and the results of learning).

PDP seeks to offer students the potential to enrich their higher education experiences. It not only helps them to develop knowledge about themselves and through this build a stronger sense of identity, but also improves their ability to relate their learning and achievements to employers' interests and needs. There is scientific evidence that the learning processes that underlie PDP, when conducted well, result in good learning outcomes.

All students on the programme are actively encouraged to continuously engage in the programme and are offered at least three tutorials a year which will include a focus on this activity. These tutorials play a fundamental role within the Personal Development & IT Skills, Personal Development & Professional Issues and the final Team Project at levels 4, 5 and 6

respectively.

Moodle Virtual Learning Environment

The majority of information available to students is placed on the Moodle Virtual Learning Environment (VLE). Moodle is a Web-based online learning and teaching system. Moodle allows lecturers to make course study material available for students via the Web. Moodle also allows students and lecturers to communicate using Discussion Forums, Announcements, Virtual Chat and email. All staff and students are provided with Moodle accounts.

Equality and Diversity

The University has adopted a policy of providing equal opportunities for all its students, staff, applicants and others involved in its work. One aspect of this policy is its intention to prevent, as far as possible, the harassment of one person by another, whether on the basis of gender, sexual orientation, sexuality, race or ethnic origin, religion, disability, or any other personal attributes or views held by the person harassed.

As part of the University's Disability Policy, students with a physical disability or learning difference are encouraged to contact the University Disability Adviser to ensure their needs are acknowledged formally. The outcome of such an assessment could result, for example, in additional time being allowed for examinations, or the provision of further learning support.

Full-Time Programme Structure

Level / Semester	Modules			
L4 Sem 1	COM406 Personal Development & IT Skills 20 Credits	COM402 Game Platforms 20 Credits	COM404 Introduction to Design: Ideas & Concepts 20 Credits	
	COM403 Introduction to Digital Audio 20 Credits	COM401 Software Methods & Programming 20 Credits	COM405 Digital Media Principles 20 Credits	
L5 Sem 1	COM503 Audio Technology for Games 20 Credits	COM502 Internet & Mobile Application Development 20 Credits	COM506 Personal Development & Professional Issues 20 Credits	
	COM501 Game Design & Development 20 Credits	COM504 Game Narratives and Characterisation 20 Credits	COM505 3D Modelling & Animation 20 Credits	
L6 Sem 1	COM601 Multiplayer Game Design & Development 20 Credits	COM603 AI Systems 20 Credits	COM605 Team Project 40 Credits	COM604 Advanced Modelling & Animation For 3D Games 20 Credits
	COM602 Mobile Game Development 20 Credits		(Across Sem 1 and 2)	

Part-Time Programme Structure (Hons and Ord)

Level/ Year/ Semester	Modules		
L4, Year 1, Sem 1	COM406 Personal Development & IT Skills 20 Credits	COM402 Game Platforms 20 Credits	
L4, Year 1, Sem 2	COM403 Introduction to Digital Audio 20 Credits	COM401 Software Methods & Programming 20 Credits	
L4/5, Year 2, Sem 1	COM404 Introduction to Design: Ideas & Concepts 20 Credits	COM506 Personal Development & Professional Issues 20 Credits	
L4/5, Year 2, Sem 2	COM405 Digital Media Principles 20 Credits	COM501 Game Design & Development 20 Credits	
L5, Year 3, Sem 1	COM503 Audio Technology for Games 20 Credits	COM502 Internet & Mobile Application Development 20 Credits	
L5, Year 3, Sem 2	COM504 Game Narratives and Characterisation 20 Credits	COM505 3D Modelling & Animation 20 Credits	
	Honours and Ordinary students		
	Ordinary students only*		
L6, Year 4, Sem 1	COM601 Multiplayer Game Design & Development 20 Credits	COM604 Advanced 3D Modelling & Animation For Games 20 Credits	COM603 AI Systems 20 Credits

L6, Year 4, Sem 2	COM602	
	Mobile Game Development	
	20 Credits	
	<i>Honours students only</i>	
L6, Year 5, Sem 1	COM603	COM605
	AI Systems	Team Project
	20 Credits	40 Credits

**Students elect 60 credits from available 80 credits during Year 4 after appropriate counselling by the Programme Team.*