



**Faculty of Computing, Engineering &
Technology**

**PgC Computer Games Design
PgD Computer Games Design
M.Sc. Computer Games Design**

Student Award Handbook 08/09

M.Sc. Computer Games Design Award

<i>How to use this handbook</i>	This handbook is specific to the M.Sc. Computer Games Design award. In it you will find information such as the structure of your award, contact details of staff, and other useful information. It should be read alongside the Post-Graduate (Masters) Scheme Handbook which details further information related to your award.
<i>What awards and qualifications are available?</i>	<p>There are three awards available; Post-Graduate Certificate, Post-Graduate Diploma, and Master of Science (M.Sc.)</p> <p>You are eligible for the Post-Graduate Certificate when you have successfully completed your first stage, consisting of a discretionary preliminary course and the first study period, which comprises two core modules and two option modules.</p> <p>You are eligible for the Post-Graduate Diploma when you have successfully completed two core computer games award modules, a Research Methods and Proposal module, and two options module in the second study period.</p> <p>The M.Sc. is awarded on successful completion of the final Masters Dissertation,</p>
<i>What modes of study are available?</i>	This course can be taken in full, and part time modes. Each mode requires that you attend the university for a full study period, but the number of modules that you take in that period defines the mode for study. Four modules defines full-time mode.
<i>What institutions are involved in delivering all or part of the award?</i>	Staffordshire University, FCET is responsible for modules within this award. The Faculty has many links with other Faculties within the university which are involved in both under-graduate and post-graduate awards both in the UK and overseas. Some of these associations help students wishing to undertake the placement aspect of the award that can be taken anywhere in the world subject to approval by the Faculties placement department.
<i>What qualifications do I need to get on the award?</i>	The normal admissions requirement for entry onto the M.Sc. award is a 2:2 undergraduate degree or higher or equivalent in any discipline related to the design or development of computer games. This may include backgrounds in Engineering, Technology, Computing, Sociology, Psychology, Architecture, Film, Music, Design, Art and Graphics and History. Students will need a passion for computer games and a clear personal view of how their background discipline fits into the field of computer games design.
<i>When can I start?</i>	See Academic Calendar in the Post-Graduate (Masters) Scheme handbook, available at http://www.staffs.ac.uk/fcet

What is the philosophy of the award?

Many people currently employed in the games industry do not have a computing background. Many Level Designers have previously been Architects due to their understanding of space and use of space. The Audio Designers have a music or music technology background due to their understanding of composition. Games Producer often employ specialist such as Historian, Psychologist and Sociologists as part of their production team for role playing games, strategy games and sims. This M.Sc. in Computer Games Design is the only MSc available which aims to provide students the opportunity to acquire knowledge and learn state of the art techniques within in its taught elements and allow students to utilize their skills learned in their wide range of undergraduate backgrounds in the context of Computer Games Design within its negotiated studies elements.

The games industry itself prefers to take people from a range of backgrounds in order to maintain its vibrancy. This award has been designed to be flexible and can be tailored to students' research aspirations and allows graduates from many different backgrounds to benefit from this MSc and ultimately benefit the games industry. The award also aims to instil sound academic and professional skills related to lifelong learning and development.

What are the aims of the award?

- To deliver up-to-date subject contents that are relevant to current and future gaming industry demands.
- To allow students to develop further their competence, building on knowledge and skills acquired in their first degree, expanding into areas of related to computer games design
- To enhance their abilities in research, problem-solving and management
- To encourage students to apply knowledge and skills to solving a problem related to games during their dissertation project

To enable students to acquire knowledge, skills, experience and confidence to pursue a successful career in academia or industry

What are the learning outcomes of the award?

Learning Outcomes		Level M
Knowledge and understanding Learning Enquiry	PGC	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
Analysis Problem Solving Application Reflection	PGC	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.
Enquiry Application	PGD	A comprehensive understanding and critical evaluation of methodologies and techniques applicable to their own research and, where appropriate, propose new hypotheses/solutions
Learning Reflection Communication	PGD	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.
Analysis Problem solving Application	PGD	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	MSC	Communicate their conclusions clearly to specialist and non-specialist audiences.
Reflection	MSC	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	MSC	The ability to carry out independent learning ability required to advance their knowledge and understanding, and to develop new skills to a high level for continuing professional development.

Period	Module Content	Stage of Award
1 st and 2 nd	<ul style="list-style-type: none"> Interface and Platform Development 1 Ludology Personal Development and Research Methods One Level M Specific Option 	PgC
1 st and 2 nd	<ul style="list-style-type: none"> Ludology 2 Games Creation Two Specific Options Level M or 3 	PgD
3 rd	<ul style="list-style-type: none"> Computer Games Design Dissertation 	MSc

Each stage constitutes 60 credits, therefore a PGC is 60 Credits, gaining a PGD is 120 credits and gaining the Masters award is 180 credits.

What will the teaching and learning methods be?

As a student studying on an M.Sc. we expect you to take a student centred approach and work both collaboratively and individually to complement the Faculties resource centred teaching mechanisms. Many of the modules you study will have different teaching and learning methods, including traditional time-tabled lectures and tutorials, whilst also using practical laboratory sessions, surgeries, group-based activities, case studies and investigations, seminars, supervision, independent reading, independent resource based learning, and problem based learning. What follows is a brief description of these methods.

- § *Independent resource based learning* where you are expected to achieve specific goals using your own personal efforts. This approach will help you build up your research skills and develop your own individual study approaches and strategies whilst using resources. This will not only benefit you on your award, but should also help you to continue lifelong learning after completing your course;
- § *Independent reading* often you will be set passages of text or research papers to read in your own time;
- § *Practical laboratory sessions* normally take the form of intensive coding on machine, with the support of a tutor;
- § *Staff-directed learning* where, through individual or group contact (e.g. in a formal lecture, tutorial or workshop), a member of staff directs your learning experience. Such an approach mixes students with diverse backgrounds, and enables different perspectives to be put forward in learning activities;
- § *Surgeries* may take place where a tutor sets you an activity, and allows you later to visit them in an informal setting to discuss and get guidance on your progress;
- § *Problem based learning* often within a module you will be set a specific problem that requires a solution to be found. To solve this problem you will need to think, and reason towards a good final solution. This approach to learning will be used both within groups and as individuals;
- § *Group-based activities* where you are expected to work together within groups (of specified sizes) to achieve a collective goal;
- § *Supervision* all students at the M.Sc. stage of the award are required to write a dissertation, a major factor related to this is learning how to work independently and be guided by a project supervisor;
- § *Case studies and investigations* on modules it is often the case that a real life scenario is used for you to investigate in order to understand how theories taught relate to the real world;
- § *Seminars* during some aspects of your award you may be asked to research a topic with others and give a mini seminar in order that others learn from your perspective.

What assessment criteria and methods will be used?

All modules are individually assessed via a number of assessment methods, according to the requirements of that module. These may include examination, presentations, demonstrations, oral viva, in-course practical assessment and individual/group assignments. In relation to the criteria by which you are assessed, each module assignment shows the individual assessment criteria for that module.

- *Coursework assignments* these can both be individual or group based, and can involve written work or code based assignments. Each assignment will have its own specification and criteria that you need to address to pass the component. You are graded against criteria based on grade points shown on page 16 of the postgraduate handbook;
- *Presentations* this forms a method of assessment which will be used within several modules in order that you get the opportunity to present your assignment findings and develop your communication skills;
- *Demonstrations* similar in the sense to presentations in that you are given the opportunity to explain your work, but this time you will demonstrate an artefact.
- *End of module examinations* on your award you will often undertake several examinations that assess how well you have learned what has been taught. You may be exposed to short answer, essay questions and multiple choice answer formats.
- *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 the work, and a demonstration of any artefact created.

Is there an overall strategy used in applying assessment methods?

Yes, we plan assessments carefully and produce a schedule for you in the first week of starting your study. You will be exposed to a rich mix of assessment methods in order that you grow accustomed to learning by many different styles. Our underlying goal is not only to assess you but to instil the skills required for lifelong learning. On most modules you will find a mix of end of module exams, coupled with a written or practical element as described in the paragraphs above.

What are the stages of my award?

Certificate stage

All four modules must be passed at the required level in order to obtain a Post-Graduate Certificate (PGC).

Diploma stage

This stage contains two computer games award core modules, the Research Methods and Proposal module and two option modules. All elements must be passed to gain a Post-Graduate Diploma (PGD). Note the Research Methods and Proposal module must be passed prior to the start of the dissertation.

Masters stage

This stage consists of two elements: The dissertation and one further option module. The option module must be selected from a Placement, Integrated Project, or Research Paper. Both the dissertation and the remaining module must be passed to obtain the Masters award.

What is the overall structure of the award?

Core

Period 1 September-January	Period 2 January-May	Period 3 May-September
Ludology 1	Ludology 2	MSc Computer Games Design Dissertation
Interface and Platform Development	Specific Option 2	
Specific Option 1	Specific Option 2	
Personal Development and Research Methods		
Games Creation		

Specific Options

You must do at least one of the following options for 15 credits

Specific Option 1	Specific Option 2
Synergy of Games and Film (15 credits) *	Games Artificial Intelligence(15 credits) *
	Games Theory and Behavioural Analysis (15 credits) *

The rest of your credits can be made up from the following modules to a total of 45 credits

Specific Option 1	Specific Option 2
Hand held Games Design (15 credits) *	Computer Games Marketing (15 credits) *
Advanced Multiplayer Online Games Design (15 credits) *	Motion Capture Data Handling (15 credits) *
Audio For Games (15 credits) *	
Advanced Character Modelling and Animation (MAYA) (30 credits) *	

The Timetable for the core modules can be found at

http://www.fcet.staffs.ac.uk/current_students/eng_postgrad.htm

For the Timetables for option modules click onto * next to the module name. Click on the name of the module to go to a description of that module.

Is work experience a possibility on my award?

Yes, an optional placement is a possibility on this award and if taken normally occurs after the first study period, but may take place after the second study period. This is normally 12 months in length, although a minimum of 6 months in industry is acceptable to pass the placement module.

What modules are core, and are there any options?

The structure has been noted above. The second study period also allows a choice of two options from a selection.

What specialisms are available to me?

The list below shows the modules currently available for this award. In making your choice you should consider the competence profile that you wish to build and upon which you may be basing your dissertation. The award team can help you if you have difficulties in making your choice.

Award Management and Regulations

Who can I contact about my studies?

Award Leader MSc Computer Games Design
Bobbie Fletcher Room C235
Tel. 01785-35204 e-mail b.d.fletcher@staffs.ac.uk

All levels managed by award leader. Individual project supervisors allocated during the dissertation period. For details of your own supervisor see http://www.fcet.staffs.ac.uk/faculty_staff/fac_staff_main.htm

Key contacts –

Staffordshire University :

Award Administrator
Chris Hanks Room k266
Tel: 01785-353462

What are Award and Assessment Boards?

At the end of each teaching semester an assessment board is held to confirm your grades. The results you achieve are recorded and these determine whether you can progress on your award. When you have completed your studies an exam board sits and reviews your module results in order to determine the classification of award you will receive.

Who attends Award Boards?

Chair : Dean of Faculty,
External Examiner,
Award Programme Manager,
Level Leader,
Project/assessment supervisors
All Teaching staff involved

When do assignments have to be handed in?

Each module defines its assignment schedule. The university runs a policy where by all hand-ins must be submitted by the required date and missing this milestone will result in a mark of Zero. An Extenuating Circumstances procedure complements this process allowing extenuating circumstances to be taken into account at the appropriate stage. Hand in at K266.

How do I hand in an assignment?

Each assignment should be handed into the main Faculty Office in the Octagon by the appropriate time. The closing time for the Faculty Office is displayed close to the office hatch. Assignments should be submitted in the appropriate folder. It will then be forwarded to the relevant tutor for review.

What about Project Approval and Management?

Project proposals are completed within the Research Methods and Proposal Module with the help of the module team. The module leader will review your proposal for approval. If your proposal is considered weak, resource hungry or in general inappropriate you will be required to improve it before starting the dissertation.

Proposals from students should:

- identify the area of study;
- show how the area of study relates to the award;
- include a project development plan, project milestones and development schedule;
- identify appropriate research areas and development methods;
- discuss relevant ethical issues related to the project
- identify the resources necessary for the successful completion of the project; and provide evidence that the student will have adequate access to these resources;
- describe the anticipated results and the products.

How will my project supervisor help me?

On completion of your Research Methods and Proposal module the Project Co-ordinator will assign you a project supervisor. During the duration of the dissertation period you will be in regular contact with your supervisor (normally a weekly meeting). Your supervisor will be allocated to you on the grounds of their expertise and fit to your dissertation topic. Their role is to specifically guide you academically, advise on literature to review, keep you progressing on schedule, provide regular feedback on your work, and guide you on ethical issues associated with the project. Please note that it is your responsibility to attend meetings regularly.

A full project dissertation handbook will be given to you when you start the dissertation period.

You will be assessed in relation to how well you complete the work set out in your proposal. Your supervisor and a second assessor will read the dissertation, and you yourself will have the opportunity to discuss and clarify aspects in a formal viva. The dissertation will be graded in the form of Pass, Merit, or Distinction.

What if I do not pass the project?

You will be given the opportunity to re-submit on one subsequent occasion and to a time-scale determined by the examination board at the time of initial failure, usually within the period of two calendar years from the date of the examination board, either in a revised form or based upon a new title. Any new title must be approved by the Faculty. A second failure will result in the student failing the Masters stage of the award.

*Are there any
Award Specific
Regulations?*

No

*What am I letting
myself in for?*

This course requires a high level of commitment for one year, or eighteen months or two years (if a placement or integrated project is undertaken). You will need to be able to devote a considerable amount of your time to intense study but having made that commitment you should gain extensive knowledge in your chosen areas and on completion be able to attempt a vast range of employment.