

PROGRAMME SPECIFICATION - UNDERGRADUATE PROGRAMMES

KEY FACTS

| | |
|--------------------------|--|
| Programme name | Computer Science with Games Technology (with Integrated Foundation Year) Computer Science with Games Technology (with Integrated Foundation and Placement Year) |
| Award | BSc (Hons) |
| School | School of Mathematics, Computer Science and Engineering |
| Department or equivalent | Computer Science |
| UCAS Code | G49F |
| Programme code | USGTEF |
| Type of study | Full Time, Professional Pathway |
| Total UK credits | 480 600 |
| Total ECTS | 240 300 |

PROGRAMME SUMMARY

The BSc (Hons) in Computer Science with Games Technology (with Integrated Foundation Year) will prepare you for a successful career in technical areas of the computing profession, specialising in computer games technology. You will develop expertise in programming and the design and build of a broad range of computer systems; core skills that are sought after throughout the computing industry & games development businesses.

The programme establishes the theoretical underpinning of computer science and builds practical skills such as programming and software engineering as a foundation to enable you to progress onto advanced topics with a focus on practical application for games development and wider computing roles whilst maintaining a strong theoretical underpinning. A 450-hour individual project will allow you to carry out an extended piece of work under the supervision of one of our specialist academic and research staff, applying your skills in games technology. The programme will also provide you with the professional skills essential for developing your career in today's computing industry.

The BSc (Hons) in Computer Science with Games Technology (with Integrated Foundation Year) is a full-time four-year Undergraduate Programme, with the option of a one-year industrial placement and a place on our Professional Pathway Scheme. The programme consists of four Programme Stages, each corresponding to an academic year. Programme Stage 0 is intended to bring you up to the same standard as students joining the main degree directly into the first year. The programme shares Programme Stage 1 with the BSc (Hons) Computer Science with Games Technology, the BSc (Hons) and MSci (Hons) In Computer Science, the MSci (Hons) in Computer Science with Cyber Security and you can transfer to/from these programmes at the end of Programme Stage 1. The programme also shares Programme Stage 2 with mSci (Hons) Computer Science with Games Technology and it is possible to transfer

to this programme at the end of Programme Stage 2. Additionally, it is possible to transfer from this programme to the BSc (Hons) or MSci (Hons) Computer Science programmes and to the MSci (Hons) Computer Science with Cyber Security at the end of Programme Stage 2. These transfers allow you to choose your final degree programme based on at least a year's experience of university study.

Each of the four Programme Stages of the programme consists of 120 credits:

- Programme Stage 0 consists of core material in computing and mathematics with an additional course on employability.
- Programme Stage 1 develops the foundational material and key computing skills, including programming and databases.
- Programme Stage 2 consists of further compulsory core computer science subject matter, specialist games technology and includes a 15-credit team project.
- You may elect to take an industrial placement between Programme Stage 2 and Programme Stage 3.
- Programme Stage 3 consists of one core module and four elective modules allowing you to develop specialisms in computer games technology, and a large, 45-credit, individual project supervised by a member of academic staff.

Aims

This programme aims to prepare you with the knowledge, skills and values needed for a technical career as computer scientist by

- equipping you with the computer scientist's core skills in programming, software engineering, databases and mathematics
- equipping you with a breadth of knowledge, skills and techniques needed as a professional in computer science specialising in the game industry
- developing your knowledge in specialised and advanced topics in computer science
- developing your practical problem-solving capabilities in applying your technical skills
- enabling you to critically evaluate the technical, social and management dimensions of computing systems and technologies
- experience of the planning, management and execution of games technology projects.

Professional Pathway

The Professional Pathway (PP) scheme is an innovative mode of study allowing students to transfer to relevant four-day-a-week employment after a period of study and complete their degree by a combination of day-release and e-learning. PP students do the same course content (with the exception of the Programme Stage 2 Team Project and Professional Development in IT module – PP students, instead,

attend Work-based Project and Continuous Professional Development in IT modules, respectively) as full-time students, but over a longer period.

Professional Pathway Entry (if you are not on a Tier 4 Visa)

Students on this programme may also undertake the Professional Pathway scheme, with entry points at Programme Stage s 2 and 3, if they:

- do well in their studies in the Programme Stage preceding PP entry (usually upwards of 55% average);
- are successful in an interview with the PP tutor who assesses their ability to cope with the demands of balancing employment and study;
- secure an approved IT placement that allows two half-days a week attendance at City.
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Professional Pathway Entry (if you are on a Tier 4 Visa)

Students on this programme may also undertake the Professional Pathway scheme, with entry points at Programme Stage 3, if they:

- do well in their studies in the Programme Stage preceding PP entry (usually upwards of 55% average);
- are successful in an interview with the PP tutor who assesses their ability to cope with the demands of balancing employment and study;
- secure an approved IT placement that allows two half days a week attendance at City
- have not already undertaken a placement year.

A placement year may precede entry to the Programme Stage 3 Entry variant of the Professional Pathway (if you do not hold a Tier 4 Visa).

Exit from the PP shall occur when:

- the student wishes to return to normal study;
- the student fails to pass the assessment for the approved placement for that year on PP and must return to normal study;
- the student is otherwise required to withdraw from the degree.

Return to normal study will require the student to pass all of modules for the Programme Stage they are in, before resuming the following Programme Stage. If a student has credit for the later Programme Stage, then this credit will be counted and need not be retaken. The student must complete all outstanding modules at the earliest opportunity.

Awards

The programme provides you with a number of exit routes.

CERTIFICATE OF HIGHER EDUCATION IN COMPUTER SCIENCE

The first exit route is for the Certificate of Higher Education in Computer Science which you are entitled to if you successfully complete Programme Stage 1 of the programme, earning 120 level 4 credits.

All of you completing Programme Stage one or the Certificate in Computer Science will be able to discuss underlying concepts and principles of computer science and relate these to concepts to relevant problems. You will be able to express solutions to problems using the formalism introduced in Programme Stage one.

DIPLOMA OF HIGHER EDUCATION IN COMPUTER SCIENCE

The second exit route is for the Diploma of Higher Education in Computer Science, which you are entitled to if you have completed the Certificate in Higher Education and in addition you have successfully completed Programme Stage 2 of the programme, earning 120 level 5 credits.

All of you completing Programme Stage Two or the Diploma in Computer Science will build on your previous knowledge and experience to develop skills of enquiry in computer science and apply a variety of approaches to problem-solving as well as identify the limitations of your knowledge. You will be able to interpret open ended problems, apply your knowledge and skills to solve them and be able to write reports on your findings.

BSc (Hons) IN COMPUTER SCIENCE WITH GAMES TECHNOLOGY

The third exit route is the BSc (Hons) in Computer Science with Games Technology, which you are entitled to if you have completed the Diploma in Higher Education and in addition you have successfully completed Programme Stage 3 of the programme, earning a further 120 credits, 90 of which at level 6, the rest at level 5 or level 6.

All of you completing the BSc (Hons) in Computer Science with Games Technology will through core and elective modules further develop a coherent systematic, detailed knowledge of computer science and games technology. You will be able to evaluate solutions to computer science problems, assess current techniques for designing and developing solutions to computer science/games technology problems and argue for your experiments using research and scholarship demonstrating your role as a reflective practitioner.

WHAT WILL I BE EXPECTED TO ACHIEVE?

On successful completion of this programme, you will be expected to be able to:

Knowledge and understanding:

- Demonstrate knowledge of a range of aspects of computer games technology
- Explain techniques used in games development
- Use and explain the core concepts and theories of computer science and computer applications

- Discuss scientific and engineering practice and theory in computing and extend your knowledge through self-led study
- Discuss management issues concerning the planning, design and delivery of computer-based systems
- Identify and model requirements for specialised computing systems and propose and evaluate solutions to fulfil them
- Demonstrate knowledge of systems architecture
- Use appropriate theories, practices and tools for the specification, design, implementation and evaluation of computer-based systems
- Explain security issues in relation to the design and use of computer systems
- Explain the concepts of computer programming and critically evaluate and predict their utility in models, tools and applications
- Demonstrate advanced, specialist theoretical and practical knowledge in a range of computer science sub-fields
- Explain the legal, social, ethical and professional issues involved in the exploitation of computer technology with respect to good professional practice

Skills:

- Develop games software using appropriate programming languages and concepts
- Apply knowledge of computer games technology to manage and execute a practical applications of computer games technology
- Apply concepts in software design to games development
- Develop and critically evaluate specifications for specialist computer systems
- Analyse, develop and select algorithms for computational tasks
- Analyse and solve problems based on theoretical considerations
- Analyse and abstract problems and propose and apply effective solutions
- Synthesise information from disparate sources to compose systems and documents
- Design and construct computer systems from given specifications
- Plan and manage a large scale problem solving computing project

- Identify the risks and beneficiaries involved in a practical computing project
- Apply controlled compromise in meeting requirements
- Apply techniques and tools for modelling and managing information
- Communicate requirements and proposals for computer systems to other computing professionals
- To work as a member of a development team recognising the different roles within a team
- Design and execute methodologically sound scientific and engineering studies
- Plan work
- Manage personal time
- Present and communicate complex ideas
- Apply sound research methods
- Understand, evaluate, synthesise and apply complex ideas

Values and attitudes:

- Assess the nature of intellectual property and its ownership, and respect it accordingly
- Explain the issues of professionalism in computing including the need for continuing professional development

This programme has been developed in accordance with the QAA Subject Benchmark for Computing.

HOW WILL I LEARN?

The programme is delivered and assessed via a coordinated combination of: lectures (including programmed student activity); supervised tutorials; supervised laboratory work; independent coursework; group project work; and individual project work and dissertation.

The teaching and assessment methods used are largely constant throughout the programme, though the level of each module determines the level at which assessment is carried out; i.e. it is the nature of the problems encountered and the solutions required that determine the level of the modules, not the activities performed. The intention is to require greater levels of analysis, autonomy, etc. as the student

progresses through the programme. This is reflected in the programme structure: fundamental concepts and skills are addressed first, followed by core knowledge that builds on this, which in turn prepares students for advanced electives and a large individual project in the final Programme Stage.

The majority of the taught modules are each delivered through a series of 20 lectures and 10 hours of tutorials/laboratory sessions. Each lecture and tutorial/laboratory session lasts 1 or 2 hours.

Project work plays an important part in computing undergraduate programmes. The Team Project provides students with experience of the issues involved in software development projects as well as enhancing team-working and related transferrable skills.

You are expected to undertake independent study, including substantial coursework assignments for each module, which will be spent working on background reading, revision of notes, work on tutorial problems, coursework and individual or group work on projects.

In the Individual Project students are expected to carry an independent investigation of a significant computing problem allowing them to apply what they learnt through the programme. This activity is carried out under the supervision of academic staff, offered through a series of supervision sessions.

Lectures are normally used to: (a) present and explain the theoretical concepts underpinning a particular subject; (b) highlight the most significant aspects of a modul's syllabus; and (c) indicate additional topics and resources for private study. Tutorials are used to help students to develop skills in applying the concepts covered in the lectures of the relevant module normally in practical problem solving contexts.

Laboratory sessions serve a similar purpose as the tutorials but their strategy will be to demonstrate application of concepts and techniques through the use of software development tools and environments.

Project supervision sessions will be used to indicate theories, methods, techniques and concepts which are relevant to the issues being investigated by the particular project as well as ways of applying these instruments in specific problem solving contexts.

Increasing use is being made of e-learning tools to supplement face to face delivery especially for the Professional Pathway cohort.

Finally, placements and the workplace learning opportunities they provide are available to all students. A professional placement and career development module supported by visits from a Work-based Learning Advisor, ensures that students are able to identify learning opportunities that will enable them to attain and demonstrate competence in a work role; these opportunities arise naturally from workplace tasks,

others are provided by negotiation focussed on the students career and development plan.

WHAT TYPES OF ASSESSMENT AND FEEDBACK CAN I EXPECT?

Assessment and Assessment Criteria

A broad range of skills and knowledge are in demand in the computing profession and assessments are tailored to the particular activity being undertaken and to your learning needs. Assessed activities include the development of working software, the application of theory to practical problems, team work, project work and the communication of problem analysis and solutions through reports and presentations. The assessment of these activities are guided by assessment criteria. Some modules are assessed by project work or coursework only, while others are assessed by a combination of coursework and invigilated exam.

Assessment Criteria are descriptions, based on the intended learning outcomes, of the skills, knowledge or attitudes that you need to demonstrate in order to complete an assessment successfully, providing a mechanism by which the quality of an assessment can be measured. Grade- Related Criteria are descriptions of the level of skills, knowledge or attributes that you need to demonstrate in order achieve a certain grade or mark in an assessment, providing a mechanism by which the quality of an assessment can be measured and placed within the overall set of marks. Assessment Criteria and Grade-Related Criteria will be made available to you to support you in completing assessments. These may be provided in programme handbooks, module specifications, on the virtual learning environment or attached to a specific assessment task.

Feedback on Assessment

Feedback on assessment is given in a variety of ways to maximise your learning opportunities. For written reports or problem solving tasks the feedback may be written, while feedback on more qualitative work may be through audio files. Face-to-face feedback is given for lab work, presentations and some group work. In all cases feedback is given so that you can learn the most you can from the work that you have done and apply that learning to future activities.

Feedback will be provided in line with our Assessment and Feedback Policy. In particular, you will normally be provided with feedback within three weeks of the submission deadline or assessment date. This would normally include a provisional grade or mark. For end of module examinations or an equivalent significant task (e.g. an end of module project), feedback will normally be provided within four weeks. The timescale for feedback on final year projects or dissertations may be longer.

The full policy can be found at:

http://www.city.ac.uk/_data/assets/word_doc/0003/69249/s19.doc

Assessment Regulations

In order to pass your Programme, you should complete successfully or be exempted from the relevant modules and assessments and will therefore acquire the required number of credits. You also need to pass each Programme Stage of your Programme in order to progress to the following Programme Stage.

Stage 0 will not contribute to your overall aggregate mark. There is however a minimum overall average mark of 60% that is required to progress from stage 0 to stage 1. For programme stage zero the pass mark for each module is 50%.

Stage 1 will not contribute to your overall aggregate mark. You must pass all your modules, as set out below, to progress from stage 1 to stage 2.

For programme stages 1,2, and 3 the pass mark for each module is 40%.

If you fail an assessment component or a module, the following will apply:

1. Compensation: where you fail up to a total of one sixth of the total credits of a Programme Stage at first or resit attempt, you may be allowed compensation if:
 - Compensation is permitted for the module involved (see the What will I Study section of the programme specification), and
 - It can be demonstrated that you have satisfied all the Learning Outcomes of the modules in the Programme Stage, and
 - A minimum overall mark of no more than 10% below the module pass mark has been achieved in the module to be compensated, and
 - An aggregate mark of 40% has been achieved for the Programme Stage.

Where you are eligible for compensation at the first attempt, this will be applied in the first instance rather than offering a resit opportunity.

If you receive a compensated pass in a module you will be awarded the credit for that module. The original component marks will be retained in the record of marks and your original module mark will be used for the purpose of your Award calculation.

2. Resit: where you are not eligible for compensation at the first attempt, you will be offered one resit attempt.

If you are successful in the resit, you will be awarded the credit for that module. The mark for each assessment component that is subject to a resit will be capped at the pass mark for the module. This capped mark will be used in the calculation of the final module mark together with the original marks for the components that you passed at first attempt.

If you do not meet the pass requirements for a module and do not complete your resit by the date specified you will not progress to the next Programme Stage and the Assessment Board will require you to be withdrawn from the Programme.

The Programme has minimum attendance requirements for designated teaching and learning events for each Stage. Students failing to meet these requirements may be subject to withdrawal from the programme.

If you would like to know more about the way in which assessment works at City, please see the full version of the Assessment Regulations at:

http://www.city.ac.uk/_data/assets/word_doc/0003/69249/s19.doc

WHAT AWARD CAN I GET?

Bachelor of Science with Honours:

For students completing the three-year programme, your overall aggregate mark will be calculated by combining the aggregate marks from Programme Stages 2 and 3 with weightings 40% and 60% respectively.

| Programme Stage | HE Level | Credits | Weighting (%) | Class | % required |
|------------------------|-----------------|----------------|----------------------|-------------------|-------------------|
| 0 | 3 | 120 | 0 | I | 70 |
| 1 | 4 | 120 | 0 | II upper division | 60 |
| 2 | 5 | 120 | 40 | II lower division | 50 |
| 3 | 6 | 120 | 60 | III | 40 |

In addition 360 credits must be achieved excluding IN3053.

Bachelor of Science with Honours (with placement):

| Programme Stage | HE Level | Credits | Weighting (%) | Class | % required |
|------------------------|-----------------|----------------|----------------------|-------------------|-------------------|
| 0 | 3 | 120 | 0 | I | 70 |
| 1 | 4 | 120 | 0 | II upper division | 60 |
| 2 | 5 | 120 | 40 | II lower division | 50 |
| Placement | 6 | 120 | 10 | III | 40 |
| 3 | 6 | 120 | 50 | | |

Diploma of Higher Education:

| Programme Stage | HE Level | Credits | Weighting (%) | Class | % required |
|------------------------|-----------------|----------------|----------------------|------------------|-------------------|
| 0 | 3 | 120 | 0 | With Distinction | 70 |
| 1 | 4 | 120 | 50 | With Merit | 60 |
| 2 | 5 | 120 | 50 | Without | 40 |
| | | | | Classification | |

Certificate of Higher Education:

| Programme Stage | HE Level | Credits | Weighting (%) |
|------------------------|-----------------|----------------|----------------------|
| 0 | 3 | 120 | 0 |
| 1 | 4 | 120 | 100 |

| Class | % required |
|------------------------|-------------------|
| With Distinction | 70 |
| With Merit | 60 |
| Without Classification | 40 |

WHAT WILL I STUDY?

Programme Stage 0

To pass Programme Stage 0 you must have acquired 120 credits at level HE3 as specified in the programme scheme. To progress from Programme Stage 0 to Programme Stage 1 of the degree, the Foundation Year requirements must have been satisfied. In particular, as stated above, a minimum overall year 0 average of 60% must be achieved.

| Module Title | SITS Code | Module Credits | Core/Compulsory/ Elective | Can be compensated? | Level |
|--|------------------|-----------------------|----------------------------------|----------------------------|--------------|
| Introduction to Programming with Python | IN0011 | 15 | Core | N | 3 |
| Web Development | IN0012 | 15 | Core | N | 3 |
| Computer Fundamentals | IN0013 | 15 | Core | N | 3 |
| Discrete Mathematics | MA0007 | 15 | Core | N | 3 |
| Introduction to Probability and Statistics | MA0009 | 15 | Core | N | 3 |
| Employability and Transferable Skills | IN0014 | 15 | Core | N | 3 |
| Advanced Programming with Python | IN0009 | 15 | Core | N | 3 |
| Group Project | IN0010 | 15 | Core | N | 3 |

Programme Stage 1

To pass Programme Stage 1, an Honours degree student must have acquired 120 credits as specified in Programme Stage 1 of the Programme Scheme. In addition a student must complete, achieving a mark of 100%, an online assessment covering risk/safety for safe operation of computing equipment. This online assessment is an exception to the assessment regulations; it has unlimited attempts but must be passed with a mark of 100% in order to progress to stage 2.

This part consists of 5 compulsory modules, worth 15 credits each, and 2 core modules, worth a total of 45 credits

| Module Title | SITS Code | Module Credits | Core/Compulsory/ Elective | Can be compensated? | Level |
|------------------------------------|-----------|----------------|------------------------------|---------------------|-------|
| Introduction to Algorithms | IN1002 | 15 | Compulsory | Y | 4 |
| Mathematics for Computing | IN1004 | 15 | Compulsory | Y | 4 |
| Systems Architecture | IN1006 | 15 | Compulsory | Y | 4 |
| Programming in Java | IN1007 | 30 | Core | N | 4 |
| Databases | IN1013 | 15 | Core | N | 4 |
| Operating Systems | IN1011 | 15 | Compulsory | Y | 4 |
| Computer Science, Ethics & Society | IN1012 | 15 | Compulsory | Y | 4 |

Programme Stage 2

To pass Programme Stage 2, an Honours degree student must have acquired 120 credits as specified in Programme Stage 2 of the Programme Scheme. For an Honours degree student to progress from Programme Stage 2 to Programme Stage 3, Programme Stage 2 requirements must have been satisfied.

This Programme Stage consists of 6 compulsory modules, each worth 15 credits, and 2 core modules, including a project module, which are worth 15 credits each.

Students may transfer into this programme route at the start of Programme Stage 2 if:

- they have passed the modules in Programme Stage 1;
- resources allow the transfer;
- the programme director approves the transfer.

A student who has successfully completed Programme Stage 2 of the BSc programme may, with the approval of the Assessment Board, transfer to Programme Stage 3 of the related MSci programme provided that they have obtained:

- the required credits for Programme Stage 2, and
- an aggregate mark of least 55% at Programme Stage 2.

Professional Pathway (Programme Stage 2 Entry)

Programme Stage 2 is spread over two years. The PP students take IN2034 instead of IN2033, and IN2031 instead of IN2015. The entry year P2(E), covers all Programme Stage 2 modules except IN2026, IN2029 and IN2031, which are taken in the following – P year – PP3(E) - along with two Programme Stage 3 electives. All module choices must be consistent with the scheme outlined in this Programme Specification.

Progression requirements between Programme Stages are the same as for non-PP students.

| Module Title | SITS Code | Module Credits | Core/ Compulsory/ Elective | Can be compensated? | Level |
|---|-----------|----------------|----------------------------|---------------------|-------|
| Data Structures and Algorithms | IN2002 | 15 | Compulsory | Y | 5 |
| Computer Networks | IN2011 | 15 | Compulsory | Y | 5 |
| Object-Oriented Analysis and Design | IN2013 | 15 | Compulsory | Y | 5 |
| Professional Development in IT | IN2015 | 15 | Core (non-PP) | N | 5 |
| Team Project | IN2033 | 15 | Core (non-PP) | N | 5 |
| Games Technology | IN2026 | 15 | Compulsory | Y | 5 |
| Programming in C++ | IN2029 | 15 | Compulsory | Y | 5 |
| Work Based Project | IN2034 | 15 | Core (PP) | N | 5 |
| Continuing Professional Development in IT | IN2031 | 15 | Core (PP) | N | 5 |
| Accenture School of Tech: Building Skills in Tech Transformation, Cloud and Consultancy | IN2032 | 15 | Compulsory | Y | 5 |

Programme Stage 3

To pass Programme Stage 3, the student must have acquired 120 credits, excluding credits acquired for the elective module IN3053, as specified in the table below.

This part consists of 1 compulsory module and 4 elective taught modules worth 15 credits each, plus 1 core project module worth 45 credits. Elective choice may be constrained by timetabling requirements. The full range of electives may not be available in all years.

Students may transfer into Programme Stage 3 of this programme from the other computing undergraduate programmes if they can ensure that the module(s) on this programme they did not take at Programme Stage 2, are taken at Programme Stage 3. This transfer is subject to Programme Director approval and resource constraints.

Professional Pathway (Programme Stage 3 Entry)

Programme Stage 3 is spread over two years. The entry year, PP3(L) requires that three or four Programme Stage 3 modules be taken. The remaining Programme Stage 3

modules, including Individual Project, are taken in the final year, PP4(L). All module choices must be consistent with the scheme outlined in this Programme Specification.

Elective choice may be constrained by timetabling requirements. The full range of electives may not be available in all years.

| Module Title | SITS Code | Module Credits | Core/ Compulsory/ Elective | Can be compensated? | Level |
|---|------------------|-----------------------|-----------------------------------|----------------------------|--------------|
| Individual Project | IN3007 | 45 | Core | N | 6 |
| Advanced Games Technology | iN3026 | 15 | Compulsory | Y | 6 |
| Language Processors | IN2009 | 15 | E | Y | 5 |
| Advanced Databases | IN3001 | 15 | E | Y | 6 |
| Computer Graphics | IN3005 | 15 | E | Y | 6 |
| Theory of Computation | IN3017 | 15 | E | Y | 6 |
| Data Visualization | IN3030 | 15 | E | Y | 6 |
| Digital Signal Processing and Audio Programming | IN3031 | 15 | E | Y | 5 |
| Advanced Programming - Concurrency | IN3042 | 15 | E | Y | 6 |
| Functional Programming | IN3043 | 15 | E | Y | 6 |
| Natural Language Processing | IN3045 | 15 | E | Y | 6 |
| Cloud Computing | IN3046 | 15 | E | Y | 6 |
| Information Security Fundamentals | IN3049 | 15 | E | Y | 6 |
| Computer Vision | IN3060 | 15 | E | Y | 6 |
| Introduction to Artificial Intelligence | IN3062 | 15 | E | Y | 6 |
| Programming and Mathematics for AI | IN3063 | 15 | E | Y | 6 |
| Agents and Multi Agents Systems | IN3064 | 15 | E | Y | 6 |
| User Centred Systems | IN3065 | 15 | E | Y | 6 |
| Semantic Web Technologies and Knowledge Graphs | IN3067 | 15 | E | Y | 6 |
| Hewlett Packard Enterprise: Technology Consulting | IN3052 | 15 | E | Y | 6 |
| Web Development | IN3050 | 15 | E | Y | 6 |
| Principles of Artificial Intelligence | IN3220 | 15 | E | Y | 6 |

| Information Retrieval | IN3066 | 15 | E | Y | 6 |
|---|-----------|----------------|----------------------------|---------------------|-------|
| With Placement: | | | | | |
| Module Title | SITS Code | Module Credits | Core/ Compulsory/ Elective | Can be compensated? | Level |
| Professional Placement & Career Development | IN3053 | 120 | Core | N | 6 |

TO WHAT KIND OF CAREER MIGHT I GO ON?

When you graduate with the BSc (Hons) in Computer Science with Games Technology you would be expected to progress directly into games technology or computer science related disciplines. These roles can be in programming and design of games engines, AI, graphics, physics and audio systems. Computer games production and management roles are also available as career paths. In addition, the degree could lead to roles in a broad range of computing areas, including all forms of software or hardware development, design and analysis of algorithms data structures and systems/data analysis. Graduates starting a new business can benefit from City's London City Incubator and City's links to Tech City, providing support for start-up businesses. Graduates may also choose to continue onto Masters degree (subject to successful application).

If you would like more information on the Careers support available at City, please go to: <http://www.city.ac.uk/careers/for-students-and-recent-graduates>.

WHAT PLACEMENT OPPORTUNITIES ARE AVAILABLE?

You will have the opportunity to undertake a placement during your programme. You will be given the opportunity to secure a role in a diverse range of companies from multinational organisations to small and medium sized (SMEs) including dynamic startup ventures both in the UK and internationally. The broad spectrum of roles available will enable you to focus on your interests whilst being exposed to new experiences and challenges.

You will have the opportunity to follow two placement routes whilst completing your study at City University; a one year placement or the Professional Pathway scheme.

The one year placement can be undertaken following successful completion of Programme Stage 2 and will be required to last for a minimum of 9 months.

You can join the Professional Pathway scheme after successful completion of Part 1 (early entry) or after successful completion of Programme Stage 2 or a one year placement (late entry). On this scheme you will attend university for one day a week

whilst under contract to your placement provider with the placement lasting for two or more years.

The following criteria apply to both placement routes.

In order to join a placement route, you must successfully complete the preceding academic year.

Your placement should be approved by the Corporate Relations & Employability Unit (CREU).

You will need to source and apply for any placement opportunities independently however support and guidance will be provided throughout the application process by the CREU.

The placement will be worth 120 credits and weighted at 10% of your final degree grade. Your placement grade will be based on the grades achieved on successful completion of IN3053 Professional Placement & Career Development module.

WILL I GET ANY PROFESSIONAL RECOGNITION?

Accrediting Body: British Computer Society

Nature of Accreditation

Partial CEng accreditation

Certificate

Diploma

Professional Graduate Diploma

PGD Project (on condition that students pass at the first attempt a practical problem-solving project)

HOW DO I ENTER THE PROGRAMME?

The Foundation Year is designed as an entry route for students who were unable to obtain the required A Level grades to access the corresponding BSc programme directly.

Our standard offer for BSc Computer Science with Games Technology (with Integrated Foundation Year) is CCC at A-Level.

In addition, GCSE English Language grade 4 and GCSE Mathematics grade 5 is required.

Each application is treated on its own merit. This is to allow us to weight in work experience, personal statements, and other factors, as and when appropriate.

Scholarships

Details of scholarships available to new undergraduate students can be found on the University's website at

<http://www.city.ac.uk/study/why-study-at-city/fees-and-finance/scholarships>

Version: 3

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