Goldsmiths

UNIVERSITY OF LONDON

Goldsmiths, University of London

EPSRC Centre for Doctoral Training in Intelligent Games and Game Intelligence (IGGI)

MPhil & PhD in Intelligent Games and Game Intelligence

Student Handbook

2018–2019

This handbook contains important information and should be retained throughout your programme. It should be used in conjunction with the Department of Computing PhD Handbook and Goldsmiths Graduate School Research Handbook.

Disclaimer

The information in this publication was correct in August 2017. Every effort is made to ensure that the information is accurate, and Goldsmiths will undertake to inform students of any material changes in the information contained in it. Examples may include but are not limited to changes to: location and methods of delivery; and the content, syllabus and mode of assessment of any programme. Goldsmiths will not be responsible or liable for the accuracy or reliability of any of the information in third party publications or websites referred to in this publication.

University Regulations

All students are required to enrol at the beginning of their course of study at the University, to re-enrol annually thereafter or inform the relevant officers if they withdraw.

By enrolling, you undertake to comply with the University's Student, Assessment and General Regulations and the requirements of your Programme Scheme, as well as with the Charter, Statutes and Ordinances of the University. In the event of any inconsistency existing between information provided in this handbook, and either the, Student, Assessment, General Regulations or Programme Scheme, the Regulations and Programme Scheme shall govern in all cases. The regulations can be found on the web at http://www.gold.ac.uk/governance/.

If you have any queries about apparent inconsistency between information in this handbook and the Regulations, please contact the Quality Assurance Manager in writing.

'Force Majeure' Obligations of the University

Goldsmiths, University of London undertakes all reasonable steps to provide educational services including teaching, examination, assessment and other related services, set out in its prospectuses and programme literature ('Educational Services'). However, except where otherwise expressly stated, Goldsmiths, University of London regrets that it cannot accept liability or pay any compensation where the performance or prompt performance of its obligations to provide Educational Services is prevented or affected by 'force majeure'. 'Force majeure' means any event which the University could not, even with all due care, foresee or avoid. Such events may include (but are not limited to) war or threat of war, riot, civil strife, terrorist activity, industrial dispute, natural or nuclear disaster, adverse weather conditions, interruption in power supplies or other services for any reason, fire and all similar events outside our control.

This handbook is available electronically and in large print format. If you would like a large print copy, please contact Lucy Jeczalik (L.Jeczalik@gold.ac.uk). It is also available on the web at https://www.doc.gold.ac.uk/intranet/academic/ and on the University's virtual learning environment learn.gold.

Welcome!

Welcome to the IGGI PhD programme! IGGI has lots of impressive statistics, which I am sure you can find elsewhere, but at its heart, IGGI is about *you*, the IGGI PhD students. Together, we want to catalyse important changes in the UK games industry, by working directly with games industry partners to research advances in:

IG (Intelligent Games): inventing new technologies and creating new knowledge which can be used to make better commercial games; and

GI (Game Intelligence): creating and investigating new genres where games are used as a tool for society and science.

The whole concept of IGGI is exciting and transformative, serious and important, but we must never forget that games are fundamentally about play and fun. The IGGI team consists of wacky, game-addicted, fun-loving people who are also international leaders in research. We look forward to learning together, working together, and playing together.

I am so glad to have you on board for our joint IGGI adventure… it should be quite a ride…

Professor Peter Cowling
IGGI Director

USING THIS HANDBOOK

This handbook provides you with information on the IGGI programme. It lets you know where you can find information you will need throughout your studies, and the services available to assist you. Please read this handbook carefully and retain it throughout your programme. This handbook is also available on the department's website at www.doc.gold.ac.uk/intranet/academic

This handbook is meant to be read in conjunction with:

- The Goldsmiths Graduate School Handbook, which provides general information and guidance for postgraduates.
- The Department of Computing PhD Programmes Handbook, which provides information relevant to studying in this department.

BEING AN IGGI STUDENT

1.1.   IGGI

The EPSRC Centre for Doctoral Training in Intelligent Games and Game Intelligence (IGGI) aims to train the next generation of researchers, designers, developers and entrepreneurs in digital games.

This handbook describes how the programme works, what you can expect from us and what we expect from you. Please note that there are three versions of this handbook; you will have the version that is appropriate for the University that you are registered at. The reason for this is that University regulations vary slightly and you must abide by the regulations of the University at which you are registered. The structure of the IGGI programme, however, is the same across all three institutions.

We have endeavoured to give you all the information you need, but since IGGI is a complex and dynamic programme, you may find that you want more! Please ask us, the IGGI staff, if anything is not clear.

1.2.   IGGI Partners

IGGI is a collaboration between Goldsmiths, University of London, Queen Mary University of London (QMUL), the University of Essex, and the University of York. The Centre brings together the expertise within these four institutions to provide our students with a truly unique opportunity.

We have a collaboration agreement which sets out how the four institutions will work together to deliver the IGGI programme. This covers each institution's formal and legal responsibilities to you and to each other. What are harder to cover are the day to day details of how the four institutions work together. Academic and admin staff work hard to make sure everything goes smoothly for you. If you find something does not go smoothly, please discuss it with your supervisor, with your local IGGI administrator or with any member of the IGGI team, and we will work hard to resolve the issue.

1.3.   IGGI management structure

As IGGI is a collaboration across four institutions, we have an IGGI lead at each site. At present, these people are Prof. Peter Cowling at York, Prof. Atau Tanaka at Goldsmiths, Prof

Udo Kruschwitz at Essex, and Prof Simon Lucas at QMUL. These four people, plus the IGGI Manager, currently Jo Maltby, form the IGGI management group, which formally manages the IGGI consortium.

There is a number of training coordinators across the consortium: Dr Sebastian Dertending (York), Dr Laurissa Tokarchuk (QMUL) and Prof Udo Kruschwitz (Essex).

Each site also has a member of the team responsible for Industrial Liaison: Prof William Latham (Goldsmiths), Prof. Anders Drachen (York), Dr Diego Perez (QMUL), and Prof. Richard Bartle (Essex)

Prof Simon Colton (QMUL) is IGGI's Impact Strategy Coordinator.

Finally, we have an administrative team across the consortium: Jo Maltby (York) and Lucy Jeczalik (Goldsmiths).

1.4.   Key contacts

Your key contacts while you are an IGGI student at Goldsmiths will be:

- Lucy Jeczalik, the Goldsmiths IGGI administrator (L.Jeczalik@gold.ac.uk, 020 7919 7865);
- Jo Maltby, the IGGI manager (joanne.maltby@york.ac.uk, 01904 325641).

The key contact at other IGGI sites are:
- York: Jo Maltby (joanne.maltby@york.ac.uk)
- QMUL: Diego Perez (diego.perez@qmul.ac.uk);
- Essex: Udo Kruschwitz (udo@essex.ac.uk).

1.6 Boards and Commitees

1.7 Student Representatives

1.4.1.   IGGI Boards and Committees

1.4.1.1. Advisory board – membership & remit

The IGGI Advisory Board monitors the IGGI training programme and ensures that our research programmes achieve substantial impacts for the games industry and those groups wishing to use games for societal benefits. They will provide feedback on your research and suggest future directions for training and research.

The current membership of the Advisory Board is as follows:

Name	Organisation
Frank Boyd (Chair)	Creative Industries Knowledge Transfer Network of Innovate UK Networks
Jerome Ma	Engineering and Physical Sciences Research Council
Steve Collins	Swrve
Luke Dicken	International Game Developers Association
Hercules Fisherman	Herx Angels
Guy Davidson	Creative Assembly
Jamie Sefton	Game Republic
Phil Willis	Digital Entertainment CDT - Bath Bournemouth
Jo Boulter / Luke Savage	Sony Computer Entertainment Europe (SCEE)
Jo Twist	UKIE
Nick Slaven	Stainless Games
Marco Starace	Samsung
Drew Field	TIGA
And from the core IGGI team:	
Peter Cowling	IGGI Director
William Latham	IGGI Industry Coordinator
Paul Cairns	IGGI Training Coordinator
Simon Lucas	IGGI Lead at Essex Uni
Simon Colton	IGGI Impact Coordinator
Jo Maltby	IGGI Manager

The IGGI Advisory Board meets twice a year.

1.4.1.2. Teaching Board

The IGGI Teaching Board consists of the training coordinator at each site:

York: Dr Paul Cairns

Essex: Dr Udo Kruschwitz
Goldsmiths: Dr Jeremy Gow

This group will meet electronically on a regular basis to discuss training activity, student support and any amendments that are required.

1.5.   Student Representatives

IGGI students will nominate one member of their cohort to be their representative at each site. These Student representatives will be invited to join the Advisory Board and other IGGI management meetings as appropriate. The only exceptions will be for sections of any meetings which involve discussing individual student cases.

The current student representative is Henrik Siljebråt (h.siljebrat@gold.ac.uk)

2. THE IGGI PROGRAMME

2.1.   Taught component

2.1.1.   Introduction

The IGGI programme requires you to complete three core modules of fifteen credits each and thirty credits of options drawn from the specialisms offered at Goldsmiths.

2.1.2.   Core Modules

The core modules for the IGGI programme will be delivered in the first year of the programme. These modules are delivered in two blocks of two weeks each, with one block delivered in the autumn term and the second delivered in the spring or summer terms, as follows:

Autumn Term:
- Research Methods (York)
- Game Design (QMUL)
- Game Development: Games Programming (Goldsmiths)

Spring Term
- Game Development: Advanced Topics (Goldsmiths)
- Research Skills (York)
- Game Design Project (QMUL)

The core module descriptors can be found in Appendix 5.

2.1.3. Managing your modules

The timing and choice of your optional modules should be agreed with your supervisor and the IGGI team. Modules for your first year have already been selected as these are the core modules. Because these are taught in two week blocks, it will not be possible for you to take any other modules in the first year. Modules to be taken in subsequent years should be decided as soon as possible with your supervisor.

Module places are filled on a first come first served basis, so early decisions will help you to secure your preferred choice.

Module choices are processed through your IGGI administrator, who will book the places for you, including for modules delivered at one of the other institutions. All choices will be confirmed with you.

You may choose optional modules delivered at any of the IGGI partner institutions. However, funding is only available to cover your travel and accommodation for the core modules in the first year. If you elect to take an optional module at an institution other than your home institution, you will have to cover the costs of travel and accommodation. It is worth noting that most modules are delivered over a 10 week period rather than in the intensive 2 week model used for IGGI core modules.

2.1.4.   Changing a Module

Students may request to change a selected module under the following conditions:

1. There are more than two weeks before the start of the module
2. There is availability for the new module
3. The request is agreed by your academic supervisor.

It is not possible to change modules once a module has started.

2.1.5.   Minimum Numbers/Cancellations of Modules

All optional modules are normally offered at least once per academic year and most have minimum numbers. Students are not guaranteed their first choices; selecting optional modules as early as possible will help to reduce the likelihood of disappointment.

The Universities reserve the right to cancel modules if there is not sufficient take up and students will be given at least two weeks' notice.

If a student has to cancel any of their module choices, they must do so at least two weeks prior to the start of the module, by emailing their IGGI administrator.

2.1.6.   Attendance of Modules

Attendance for all core and selected optional modules is compulsory. See Goldsmiths attendance regulations for more information:
https://www.gold.ac.uk/governance/generalregulations/attendanceandprogress/

2.1.7.   Assessment and Submission of Modules

Taught modules will be assessed via several different modes and the submission and regulations of assessed work will also vary according to the institution delivering the module.

For further information on assessment regulations and submission requirements for an individual module, please refer to the module webpage and to the websites of the University delivering the module.

2.1.8. Teaching & Learning

A variety of modes of teaching are employed during the modules, as appropriate to the material and skills to be imparted and tested:

- Lecture-style presentations
- Laboratories
- Problem classes
- Private study
- Self-directed study
- Project work

2.1.9. Assessment Methods

The majority of formal assessments will be open, but there will also be project work

- Open Assessments: all open assessments are marked by the module owner and are either double-marked or checked, according to the regulations of the University conducting the assessment.
- Project Work: a student's individual project is assessed on the basis of a written report and an oral presentation, which are marked according to the procedures and regulations of the University conducting the assessment
- Closed Examinations: closed examinations will be used where this is the most appropriate approach. Students' knowledge and understanding are tested on a strictly individual basis.
- Some modules may be assessed continuously, i.e., consist of several pieces of assessment throughout the delivery of the module.

2.1.10. Examination of Modules

The examination of the taught modules is carried out by the University running the module, in accordance with its examination procedures.

In accordance with the normal practice of the University running the module, alternative assessments or assessment arrangements are made where necessary for Students with disabilities.

2.1.11. Module Results and Feedback

All results are reported to and ratified by that University's Board of Examiners and Board of Studies responsible for the module, in the presence of an external examiner.

If you fail a core IGGI module, you will be given an opportunity to resubmit for reassessment.

If you fail an optional module, please refer to the regulations under which that module operates. If in doubt, please speak to the member of the IGGI administration team at the University at which the module is delivered.

2.2. Research component

2.2.1. Introduction

The IGGI programme is carefully structured to guide you through the research process and support you in completing your PhD within the time permitted.

2.2.2. What does a supervisor expect of students?

Self-discipline
An academic supervisor expects students to comply with all University and Departmental regulations. For example, they should submit satisfactory work for assessment by the agreed deadlines. More generally, supervisors will expect students to be disciplined, hard-working and, as research progresses, increasingly capable of taking control of the direction of their own research.

Preparation for supervisions
Students should be available and adequately prepared for regular supervisions. They should keep a research notebook in which an up to date record of their research work is maintained. Supervisors might also ask for more specific preparation: for example, that students read and comment on certain papers or make a written summary of their plans of work.

Keeping supervisor(s) informed
Students should always maintain regular contact with their supervisors, even when it is not possible to have normal supervisions, e.g. if a student or a supervisor is away. Students should always make supervisors aware of any circumstances or needs which are likely to affect their work as soon as they arise.

Publication
A student's supervisor will expect and encourage them to produce work of publishable quality. It is common practice to name the supervisor as co-author of a paper describing supervised research work. The unaided work of a student should, of course, be attributed to the student alone, but papers cannot be submitted for publication by students bearing the name of their home institution without the approval of a member of staff (which can be, for example, the supervisor).

Contributions to the Group and Department
A student's interests should not be restricted to their own particular topic of research, but should extend at least to the work of other IGGI and other PhD students in the research group of their academic supervisor, and in some measure to the whole of the department they are within. Supervisors will also expect students to gain some knowledge of developments in other fields relevant to their research, e.g. by general reading and attending departmental seminars where scheduling permits.

Maintaining the supervision relationship
A good working relationship between student and supervisor is very important. Any problems that develop in this relationship need to be resolved at an early stage. If some difficulty arises that proves hard to resolve just by talking it over with the supervisor, students may find it helpful to discuss it in confidence with another member of the core IGGI team, either at their home institution or at one of the others. Alternatively, students can talk with any member of their departmental research studies committee or equivalent – either a student representative or a member of staff.

2.2.3. What is expected of an academic supervisor

Meetings for supervision

A supervisor should be available and adequately prepared to meet to discuss their student's work on a regular basis. A student can expect a minimum of an hour's supervision every fortnight. Some supervisors aim for twice this time or frequency, however, the minimum may be sufficient. Whatever their frequency and duration, supervisions should be "quality time" for technical and planning discussions.

Formal recording of attendance and supervisions

Supervisors and students are required to record a minimum of two meetings per term, where a discussion of research progress takes place.

Research guidance and support

Supervisors are usually experienced researchers who are very familiar with the field of research of their studies, so it is natural for them to offer guidance as to the lines of research that might be pursued. Supervisors monitor their student's progress, help them to obtain appropriate literature, materials and equipment, suggest directions, plans and techniques for research and provide (or arrange) necessary training.

Feedback and collaboration on written work

To enable students to produce written work of publishable quality, students can reasonably expect their supervisor to read drafts of all their papers and reports, and to provide detailed comments and suggestions for improvement. Published papers are often co-authored by a student and their supervisor; but the provision of feedback applies as much to drafts of documents required as part as to external publications. Wherever possible, documents submitted for comment at one supervision are returned by the next - though for something like a complete draft thesis students might have to wait a little longer! Following a formal assessment, students can expect written constructive feedback. Copies of the assessment forms completed by a student supervisor will be made available to students.

Help contacting and dealing with other parties.

A student supervisor is their first point of contact with the University system, and the student can seek their advice and assistance in any University-related matter, e.g. provision for any special needs they may have for medical or any other reasons. Similarly, a student supervisor is there to help when they need to deal with external bodies such as research councils and sponsors. They may also be able to introduce students to national and international research community in their field, help them to establish research contacts and to keep them informed about relevant conferences and workshops.

2.2.4. Thesis Advisory Panel Meetings

Thesis Advisory Panel meetings must take place, within two months, following the submission/completion of each major research milestone. The first meeting should take place following the submission of the Individual Project and oral presentation. TAP meetings should be attended by the student, academic supervisor(s) and assessor.

2.2.5. Research Timetable

Milestone	Year	Month
Literature Review report and seminar	1	12
Qualifying Dissertation, including plan of work	2	18

Progression Report and confirmation of PhD enrolment	2	24	
Thesis Outline	3	30	
Thesis Audit	3	36	
Thesis Seminar	4	45	
Thesis submission final deadline	4	48	
Viva examination			

We will use the current TAP meetings and milestones structure of the department of Computer Science

2.2.6. The individual project

The individual project will be carried out during the first six months. There will be regular normally weekly supervision meetings between the student and their academic supervisor. The student's academic supervisor will mark the project report. The individual report must comprise a critical review of the literature in the student's research field and include a clearly identified set of references. It must also present an outline of and the motivation for the research work that the student plans to conduct for their IGGI thesis. It must show ability for scientific writing and an understanding of available research methods. An oral presentation (approx. 40 mins.) is required as part of the assessment for this piece of work, normally within one month of submission. The individual project should be submitted according to the timetable above, to the IGGI Administrator. The individual project should be 7,000-10,000 words in length. The individual project should be submitted on email, as a pdf document, to the IGGI administrator.

2.2.7. Qualifying Dissertation

The qualifying dissertation should be submitted according to the timetable in section 14.6, to the IGGI Administrator. Each dissertation is examined by the supervisor, who conducts the oral examination. The oral examination will usually be one to two months after the submission of the dissertation. The examination is also an occasion for more general discussion of the student's progress, and his or her work so far. Afterwards, the supervisor and assessor report to the Board of Studies via the RSC. It is not unusual for some revision of the dissertation to be required. If the final version is satisfactory, continuation of registration is confirmed (along with the continuation of a studentship in the case of EPSRC-funded students).A qualifying dissertation should be structured along the following lines:-

1. Title page, abstract, table of contents.

2. Introduction: identify and describe in outline your chosen field of research; explain the motivation for research in that field.
3. Field Survey and Review: give a thorough account of previous and current work in the field, with ample citations of relevant literature; assess the current state of the field, e.g. discuss assumptions generally made and their validity, limitations generally accepted and their necessity, major open problems and prospects for their solution and the relative strengths and weaknesses of the major lines of work pursued to date.

4. Proposal: define carefully the aim and path of your proposed research; state specific objectives, give criteria by which you will judge success, set out plans of attack, identify the most important techniques and methods to be used.

5. Preliminary results: describe research work you have already undertaken; report any results you have already obtained and discuss their significance.

6. References: give full bibliographic details of all books and papers referred to in the dissertation.

A qualifying dissertation should be 12,000-20,000 words in length. The relative sizes of sections 2 to 5 should be agreed between student and supervisor. The dissertation should be margins of at least 2 cm all round. The Qualifying Dissertation should be submitted on email, as a pdf document, to the IGGI Administrator. Please note if revision is required, please submit one copy of the final revised and approved qualifying dissertation to the IGGI administrator, to be electronically stored in the on-line departmental Library.

2.2.8. Progression Report

The progress report should be submitted according to the timetable above, to the IGGI Administrator. As with the qualifying dissertation, this document should be typed and submitted to the IGGI Administrator. The report should include details of the progress which has been made so far. It should make clear how much research work has already been completed, state plans for future work, and include a timetable of work to be completed for the submission of the thesis. Supplementary material such as a published paper may be attached to the report. An oral examination is conducted by the supervisor(s) and the assessor within two months of submission. Following that, and associated discussions with the student, a recommendation for upgrade is made by the examiners to the Board of Studies and to the university via the RSC. If a report cannot be revised satisfactorily, possibly after a referral, registration may be terminated, and the student is not allowed to progress to the fourth year. An option may be given for the student to write up for an MPhil. A progress report should be structured along the following lines:

1. Title page, abstract, table of contents.
2. Introduction: Identify and describe in outline your chosen field of research; explain the motivation for research in that field. (This can be very brief if little has changed since your qualifying dissertation: the greater any change of emphasis, the longer your introduction needs to be.)
3. Progress: Describe your research work so far. Outline the results you have already obtained and discuss their significance for your overall aims. Describe the material that you already have towards your thesis; if you have written a technical report that may end up as a thesis chapter attach it to your proposal. Published or submitted papers should be referenced. External conference or seminar/presentations should also be mentioned.
4. Plans: Briefly describe how you intend to develop your research; describe your main goals and the scope of the work which is still to be undertaken; provide timetable of work to be completed prior to submission.
5. References: give full bibliographic details of all books and papers referred to in the proposal.

A progress report should be 2,000-4,000 words in length (though may include copies of relevant technical papers as supporting material). It should be typed or printed to a good standard on A4 paper, with blank margins of at least 2cm all round. The Progress Report should be submitted on an email, as a pdf document, to the IGGI Administrator. Following the approval of the report by supervisor(s) and assessor, a separate copy of the approved timetable should be handed in to the IGGI administrator. Please note if revision is required, please submit one copy of the final revised and approved progress report to the IGGI administrator, to be electronically stored in the on-line departmental Library

2.3.1. The IGGI Milestone System

As an IGGI PhD student you are expected to pass a formal milestone every six months. These provide an opportunity for you and your supervisors to review the overall progress of your research, and for you to receive feedback from them. It also helps the IGGI team to understand your progress and how we can best support you.

Each institution in IGGI has its own milestone system, in line with local regulations. Although the details vary, they share the same structure. We aim to provide the same level of review and support across IGGI. Here we describe how the system works at Goldsmiths.

Milestones involve a meeting between you and your supervisors, where their feedback is formally recorded and shared with both you and us. They may involve other requirements, as outlined in the table and described in detail below. These milestones are compulsory elements of the IGGI PhD programme.

Month	Requirements	Deliverables
M6	Progress meeting	Industry engagement plan
M12	Progress meeting	Literature review report
M18	Progress meeting	
M24	Progress meeting	Draft upgrade report Academic paper OR* placement report
M24-30	Upgrade to PhD status	
M30	Progress meeting	
M36	Progress meeting 8 weeks of placements	Third year report Academic paper AND* placement report Research demo*
M42	Progress meeting	
M45	Progress meeting Thesis seminar	
M48	Thesis submission OR Continuation year (college approval required)	Thesis OR Continuation year plan
M49+	Progress meeting (every 3 months) Thesis seminar (3 months before submission)	

Notes:
- By M24 either an academic paper or a placement report should be completed. The other deliverable should then be completed by M36.
- The research demo requirement was introduced in September 2017, i.e. for cohorts 4 and 5. Students who started on the programme before that date are encouraged, but not required, to produce a demo.

Completing Milestones

Your progress against each milestone is checked shortly after the corresponding period of study has passed, e.g. M12 is checked at 12 months. Deliverables should be submitted before the end of that period, e.g. by the end of month 12. Progress meetings should normally take place within a couple of weeks of that date. We will remind you of upcoming deadlines in advance.

If you interrupt your studies or switch to part-time, the milestones are pushed back to reflect this. So, for example, M36 is after 36 months of study time, not necessarily 36 months after you started. If you think you have some other reason to delay a milestone, such as a clash with a conference, you should seek approval from the IGGI lead at Goldsmiths.

Progress Meetings

This is a meeting between you and your supervisory team, including your second supervisors, where you formally record progress made over the last six months and plan next steps. Your primary supervisor should complete a progress form after the meeting, which they then email to you and us (via iggi@doc.gold.ac.uk). The form is available from the local IGGI administrator.

You and your supervisors should decide how to run these meetings so that they best meet your needs. Some students start the meeting with a formal presentation of their work. Some choose to invite another academic to provide an external perspective. If second supervisors are yet to be recruited, the primary supervisor should organise other academics to stand in.

At M24 / M45 the progress meeting can be scheduled before or after the PhD upgrade / thesis seminar.

Deliverables

You should email any deliverables to both the local IGGI administrator and your supervisors by the deadline provided.

A specification of each deliverable is given below. Your supervisors are responsible for evaluating the deliverable and providing feedback. You should discuss their expectations in advance and, in the first instance, direct any questions to them. The IGGI academic staff at Goldsmiths can also provide general advice and guidance.

Your supervisors, or the Goldsmiths IGGI lead, may decide that a deliverable does not meet the expected standard. In such cases, the IGGI lead will consult with your supervisors and decide on a schedule for resubmission of the deliverable.

Industry Engagement Plan

This is a short report that demonstrates you have a plan to engage with the end users of your research during your PhD. In many cases, the end users will be some section of the games industry or players, but it can include other groups outside your field, e.g. medical researchers using games to gather data.

The report should describe and justify a method, sample, and project plan for eliciting the state of the art practice and current needs of end users, with respect to your research topic. For example, a plan to conduct 15 expert interviews with senior product managers, or for a survey among Develop visitors. You can include any initial findings.

Literature Review

The literature review is a written report of around 7,000 to 10,000 words, containing:
- An introduction describing the direction your research is taking and the research questions it addresses.
- A review of the relevant research literature.
- A summary of how you plan to build on the existing literature, any areas of literature you have identified for further study, and any initial results from your own research.
- Outcomes from the industry engagement described in your M6 report.
- An outline plan for the second year of your research.

Academic Paper

The academic paper should be on your doctoral research and suitable for publication in a journal, conference, workshop, or doctoral symposium. You should be the primary author and contributor to the paper, although it may contain other contributions from co-authors. It should be in an appropriate academic format and ready for critical assessment by peer review.

There is no requirement for the paper to have been published, although normally it should have been submitted to an appropriate venue. If the paper has not been submitted, or has been rejected, or has been substantially written by a coauthor, the supervisor should comment (via the progress form) on the suitability of the paper for this requirement.

Placement Report

This short report should be written after you have completed the required 8 weeks of industry placements. It should reflect on the placement(s) and relate the experience to your doctoral research.

A copy of this report should be sent to the IGGI industry lead at Goldsmiths.

Draft Upgrade Report

This is a draft of the report you intend to submit for your upgrade from MPhil to PhD (see below). It should be roughly 12,000 to 20,000 words in length and include:

- Title page, abstract, table of contents.
- **Introduction**: identify, outline and motivate your chosen field of research.
- **Literature review**: give a thorough account of previous and current work in the field, with ample citations of relevant literature; assess the current state of the field.
- **Proposal**: define carefully the aim and path of your proposed research; state specific objectives, give criteria by which you will judge success, set out plans of attack, identify the most important techniques and methods to be used.
- **Current Progress**: describe research work you have already undertaken; report any results you have already obtained and discuss their significance.
- **Plan**: Briefly describe how you intend to develop your research; describe your main goals and the scope of the work which is still to be undertaken; provide a timetable of work to be completed prior to submission.
- **References**: give full bibliographic details of all books and papers referred to in the report.

You may reuse material from your year one milestone. Note that this combines the Qualifying Dissertation and Progress Report from the original IGGI milestone system.

Upgrading to PhD

IGGI students should aim to upgrade from MPhil to PhD status around 24 to 30 months into the programme. This requires a final version of your upgrade report (see above) and a viva.

The standard Goldsmiths process for upgrading should be followed:
- Recruit two suitable Goldsmiths academics, who are not your supervisors, as assessors.
- Submit an upgrade report that includes:
    - A plan of the thesis;
    - A realistic timetable for completion within the 4 year period;
    - Two draft chapters of research or equivalent work, one of which is a literature review.
- The assessors review the report and conduct an oral examination. They should submit a Transfer of Registration form to the local IGGI administrator.

See the Graduate School handbook for the full requirements and regulations.

Research Demo

The research demo is a piece of practical work suitable for disseminating your doctoral research at public events. The format could be a game, a short film, an interactive artwork, or something else agreed with the IGGI training lead at Goldsmiths.

The demo should:
- Be produced to a professional standard;
- Communicate something substantial about your research;
- Suitable to engage a general audience in a public setting, such as at a conference stand or in an exhibition;
- Work in a public setting without constant attendance, e.g. it should not crash regularly or even easily.

Third Year Report

The report should be roughly 4000 to 6000 words long and contain:
- Title page, abstract, table of contents.
- **Introduction**: Outline and motivate your chosen field of research. This can be brief if little has changed since your last progress report.
- **Thesis Structure**: Give a chapter by chapter plan of the thesis. Describe in detail the contents of each chapter. Explain where you have completed the work and give references to any papers or reports which will contribute to the thesis. Where the work has not been completed, explain how much progress has been made.
- **Plan**: Briefly describe how you intend to complete the remaining work. Give a timetable your final year, including writing up.
- **References**: give full bibliographic details of all books and papers referred to in the report.

Thesis Seminar

You should present a seminar at Goldsmiths, to an audience of academics and PhD students, approximately three months before thesis submission. It should set out the central ideas and results of your thesis, as if presenting your work at an international conference. This demonstrates that you can prepare and present a coherent account of your doctoral research, and provides an opportunity for other researchers to provide constructive feedback on your research before you finalise your thesis. Your supervisors should be present.

The seminar should last about 30-45 minutes. It may be part of a research group seminar series or a one-off. It should be advertised in advance within Goldsmiths Computing (and Psychology if appropriate), and to other IGGI students and staff across the consortium.

Continuation Year Plan

The continuation year is a contingency for students who cannot complete their IGGI PhD thesis within 4 years. You SHOULD NOT aim to use the continuation year. If you wish to, then you will need to seek formal approval from the Graduate School.

You should produce written plan for your continuation year, agreed between you and your supervisors, and updated quarterly. It should cover:
3. Plans for residency and employment;

4. Supervision arrangements for the next quarter (where, how, how often);
5. A timetable for drafting and review of the thesis.

2.3.2. Thesis Outline

The thesis outline should be submitted according to the timetable above, to the IGGI Administrator. As with other reports, it should be typed and submitted to the IGGI Administrator. The thesis outline should contain a detailed discussion of the structure of the proposed thesis including a chapter-by-chapter summary of the content of the thesis. The report should highlight which parts of the research have been completed and the work which still remains to be done. It should also contain a timetable for completion of the thesis. An oral examination is conducted by the supervisors, within two months of submission. A Thesis Outline should be structured along the following lines:

1. Title page, abstract, table of contents.
2. Introduction: Identify and describe in outline your chosen field of research; explain the motivation for research in that field. (This can be very brief if little has changed since your progress report; you should highlight important changes to the direction of your research)
3. Thesis Structure: Give a detailed chapter by chapter plan of the thesis. Include a description of the contents of each chapter. Explain where you have completed the work and give references to any papers or reports which will contribute to the thesis; where the work has not been completed, explain how much progress has been made.
4. Plans: Briefly describe how you intend to complete the remaining work; give details of your timetable for the remaining research and writing up.
5. References: give full bibliographic details of all books and papers referred to in the proposal. A thesis outline should be 4,000-6,000 words in length. It should be typed to a good standard on A4 paper, with blank margins of at least 2 cm all round. The Thesis Outline should be submitted on email, as a pdf document, to the IGGI Administrator. Please note if revision is required, please submit one copy of the final revised and approved Thesis outline to the IGGI administrator, to be electronically stored in the on-line departmental Library.

2.3.3. Thesis Audit

The thesis audit takes place according to the timetable is section 14.6.Though the audit is not a formal assessment, it is another means of checking that appropriate progress is being made. The student completes a short form summarizing the state of his or her work towards a thesis. After discussion with the supervisors, plans are revised if necessary to ensure that a successful thesis can be submitted on time.

2.3.4. Thesis Seminar

The purpose of this seminar is for the student to present the central ideas and results of his/her thesis to his/her supervisor, assessor and colleagues, normally in the context of one of the Integration Activities. The goal is to ensure that by this stage in their study, students have a clear understanding of how they intend to present the results of their research in a concise form. In many respects a Thesis seminar should take the same form as would a presentation of the student's thesis at an international conference in his/her field of study. Consequently, although every attempt should be made to make the presentation accessible to a wide audience, the emphasis should be on results and not on providing background material. The title of the seminar must be given to the IGGI administrator at least two weeks before the seminar is to be given. The seminar should last about 35-40 minutes and will be assessed by

both the supervisor and assessor. The purpose of the assessment is to provide constructive feedback on both the technical contents of the proposed thesis and the style in which it was presented. Although it is a requirement for each fourth year student to give a thesis seminar, the award of the PhD is not dependent on the outcome of the seminar. A meeting between the student and supervisor will take place shortly after the seminar to discuss the content of the thesis and final plans for completion of the thesis.

2.3.5.   The IGGI Thesis
The completed thesis **must** be submitted by the end of the fourth year.

Students must consult their supervisor(s) before submitting a thesis or dissertation for examination.

About two months before a student expects to submit their thesis they should complete the Notification of intention to submit – speak to your IGGI administrator about the correct way to do this at your institution. This is to allow the department to make the necessary arrangements for your examination. The Board of Studies in Computer Science has agreed a maximum word limit for IGGI theses of 100,000 words. The limits are advisory rather than mandatory, but written permission must be obtained from the RSC Chair if they are to be waived. The limits include appendices. Long program listings should not be submitted as part of a thesis.

2.3.6.   Submission for Examination
All IGGI theses should be submitted to the examination office of the institution at which you are registered and must meet the university requirements for presentation, as defined in:- Guidance on the presentation and submission of theses and dissertations for research degree programmes. In addition to the submission requirements of the University, the student also has to submit an electronic pdf of their thesis to the IGGI administrator.

2.3.7.   Viva examination[1]
Candidates for the IGGI degree are examined orally on the material of their thesis. This viva examination is carried out within 3 months of thesis being submitted, by at least two examiners, at least one of whom is not a member of the University. All IGGI oral examinations will be audio recorded as a means of providing an objective record of the oral examination. All recordings will be held and treated in confidence. External examiners are appointed by the University Senate, after a recommendation has been made by the Board of Studies. After the examination, the examiners make recommendations to the Board of Studies, via the Research Studies Committee which then passes the result to the University. The recommendation may be one of the following:

i) that the candidate be awarded the degree with no corrections to the thesis being required;
ii) that the candidate be awarded the degree subject to minor corrections being made to the thesis to the satisfaction of the examiners;
iii) that the thesis should be referred for resubmission, after a further period of no more than twelve and no less than three months. A thesis may normally be referred on one occasion only. The thesis shall be re-examined, normally by the original examiners. The examiners may require a further oral examination.

---

[1] This section describes the process at the University of York as an indication. There may be subtle variations between the three institutions. Please refer to the regulations at the institution at which you are registered.

iv) that the candidate be awarded the degree of MPhil with no corrections to the thesis being required;

v)that the candidate be awarded the degree of MPhil subject to minor corrections being made to the thesis to the satisfaction of the internal or another of the examiners;

vi) that the thesis should be referred for resubmission, after a further period of no more than twelve and no less than three months, for the degree of MPhil. A thesis may normally be referred on one occasion only. The thesis shall be re-examined, normally by the original examiners. The examiners may require a further oral examination;

vii) that no degree should be awarded.

2.3.8. Written feedback[2]

Written feedback should be provided to the student within one week of the viva. In the case of minor revisions, the written feedback takes the form of a list of corrections which should be made within one month. Once these are completed, the final version of the thesis must be passed to the internal examiner for approval.

In the case of a referral, the written feedback contains a description of extra work that must be undertaken. This should be completed under the guidance of the supervisor, and a revised version of the thesis should be submitted for a new examination. This usually does not require a second oral examination, but can take up to three months from the submission. After the examination process is complete, any requests for further corrections are passed to the student.

When any minor amendments are completed to the satisfaction of the internal examiner, then final copies of the thesis (a printed copy and an electronic copy) should be submitted to the university as described in Guidance on the presentation and submission of theses and dissertations for research degree programmes Students are responsible for the cost of binding the copies of thesis submitted for examination. Successful students must also pay for the final copy presented to the university

2.3.9. Extensions

All assessed work should be submitted by the agreed deadlines, unless an extension has been granted. Extensions for the intermediate reports (other than the final thesis) are considered by the Chair of the RSC. Requests for extensions should be made, in writing, as soon as possible and, in any case, before the relevant deadline. Extensions are normally for one or two weeks or, exceptionally, for a month. A longer delay usually requires a suspension of registration.

Requests for an extension must be submitted in writing to the Chair of the RSC, giving specific grounds for the request, and the extension submission form found on www.york.ac.uk/students/studying/manage/plan/ should be completed by the student and the supervisor(s), ensuring the documentation providing relevant evidence is attached.

2.4. Detail: Industry engagement & skills training

---

[2] This process may vary slightly across the three institutions; please refer to the local regulations.

2.4.2. Regular IGGI events

Symposium

There will be an annual IGGI symposium which will be hosted by each of the three partner institutions on a rotating basis. The symposium will bring together people from academia and industry, as well as other interested stakeholders. This will be a chance for you to share your research as well as hearing from others across all groups.

Industry Days

These days will be arranged throughout the year and will give you direct access to our industry partners. These events will vary: some will involve a number of industry partners; others will be intensive master classes with one industrial partner.

Game Jams

Once a year, we will take part in a Game Jam, selected by the IGGI team.

Our expectations of you

These are events which you are required to attend, and your academic record will reflect this. Non-attendance can only be with the prior agreement of your academic supervisor

2.4.3. Student placements

As an IGGI student, you are expected to undertake at least two industry placements. The first will be short placement, indicatively of two weeks, in your second year, and the second will be a placement of up to six months in your third year of study.

Organisation

These placements will be organised after discussion between our industry partners, our industry liaison team, your supervisor and yourself. In most instances, we will generate opportunities for you. However, if you have a pre-existing relationship with a particular organisation and both parties are interested in working together on a project which is coherent with your research, please discuss these opportunities with your supervisor, in the first instance. The industry liaison team can then follow up to negotiate all the practical and legal matters involved in a placement.

Ongoing support during your placement

While you are on placement, you continue to be a student of your University. As such, you will continue to be supported by your academic supervisor and by the IGGI administrative team. You can expect your supervisor to visit you on site during your longer placement, and at least on member of our industry liaison team will visit during that time as well.

3.   BEING A STUDENT

3.3.   University Practice & Regulations

3.3.2.   Academic Progress, Exams & Assessment

For the taught element of the IGGI programme, all IGGI students are governed, and progression is managed, by the University full time postgraduate taught regulations.

3.3.3. Introduction[3]

The departmental procedures and policies for all assessments are covered in the departmental Statement on Assessment:
http://www.cs.york.ac.uk/student/assessment/policies/

This is a long and comprehensive document. Not all of it (e.g. how to set an exam) is of immediate relevance to students but it is students' responsibility to find out what the procedures are. The key parts to read for all students are:

Purpose and Scope
Responsibility for Assessment
Types and Timing of Assessment
How assessments are conducted
Feedback after Assessments
Progression and Awards
When there are problems: extensions and mitigating circumstances

Other sections may be important to some students so please select accordingly and it may in fact be useful to read all of it.

3.3.4. Mitigating Circumstances

You can ask the Board of Examiners to take account of medical or compassionate circumstances that have affected any of your assessments by completing the relevant parts of a form and providing relevant supporting evidence. If you need to submit a form, do not delay; complete and submit one as soon as possible. For the examiners to be able to take your circumstances into account, your form must be received and considered by a small committee which normally meets well before the examiners' meetings. Forms without supporting evidence will not be considered. All mitigating circumstances applications must be submitted to Jo Maltby, IGGI Manager.

3.3.5. Academic Misconduct

The University's Statement on Academic Misconduct

You are responsible for ensuring that your work does not contravene the University's rules on academic misconduct. The University takes a very serious view of such misconduct and penalties will be applied if you are found to have attempted to mislead examiners. Forms of academic misconduct include:

Cheating – deliberate failure to comply with the rules governing examinations, e.g. by making arrangements to have unauthorized access to information.

Collusion – assisting another individual to gain advantage by unfair means, or receiving such assistance yourself.

Fabrication – misleading the examiners by presenting work for assessment in a way which intentionally or recklessly suggests that you have collected factual information which has not in fact been collected, or falsifies factual information.

---

[3] This information pertains to York, but is indicative of the expectations at all three institutions. Please refer to the precise regulations at the University at which you are registered.

Personation – acting, appearing, or producing work on behalf of another candidate, in order to deceive the examiners, or soliciting another individual to act, appear or produce work on your own behalf.

Plagiarism – incorporating within your work without appropriate acknowledgement material derived from the work (published or unpublished) of another.

Deception – intentionally or recklessly presenting fabricated or misleading information (e.g. relating to medical and compassionate circumstances) in order to gain advantage in regard to an assessment or progression or procedural requirements.

If you have any queries about what constitutes academic misconduct, or about the proper attribution of material derived from another's work, you should ask your supervisor.

If you are taking elective modules in another department check the Academic Misconduct rules in that department. There may be small but significant differences in the definitions of, for instance acceptable collaboration in different disciplines.

At an early stage in your programme, you will be required to complete a standard online tutorial on Academic Integrity.

Avoiding Plagiarism and Collusion

Avoid plagiarism by always acknowledging the sources of the material you have used (including software and information on the web). If you copy a passage of text clearly mark the entire extent of the quotation using quotation marks or an italic font, and cite its source. Record unpublished work, such as an email or a conversation, as 'private communication'. Treat lecture materials as published materials too.

In programs submitted for assessment, do not "re-invent the wheel": if you find a piece of code written by someone else that does what you want, use it. However, be sure to include a comment acknowledging its source and making clear that you understand how it works.

Avoid collusion by following the guidelines for mutual assistance and collaboration given in the next section.

3.3.6.   Guidelines on Mutual Assistance and Collaboration

General guidelines

If an assessment is completed by students working in pairs, or in groups, you should be given *explicit guidance* about the level of acceptable collaboration within each pair or group. In some assessments, you may be given *explicit encouragement* to involve other students in a specific aspect of your work, such as evaluation and testing. Aside from such explicitly permitted exceptions, the following guidelines apply.

While an open assessment is in progress, you may discuss it with your fellow students only to understand the nature of the problems or questions set, not to find out how to solve or answer them. What you submit must be your own work. Do not collaborate when producing the solution or answer to an assessment. Do not copy another student's work, and do not allow another student to copy yours. If in doubt as to whether you may seek or give assistance of some kind, ask the member of staff who set the assessment.

When *writing an essay or report* for an open assessment, discussion or collaboration are permissible in the initial process of determining the nature and requirement of the question. You will then need to select relevant pieces of information from available sources and to evaluate their usefulness and consistency. In this process of selection and evaluation, often involving careful analysis and judgment, you are *not* permitted to work with others. Nor may you share the details of your own essay or report. All information used in your essay or report drawn from any source other than your own work and ideas must be explicitly referenced.

When an assessment requires the development of hardware or software, discussion and collaboration are again permitted in the initial process of examining and clarifying requirements – though only the setter of the assessment can rule on any perceived ambiguities. The subsequent work of design, implementation and testing should essentially be done alone. If you are stuck for want of a minor piece of specific information (e.g. the symbol for some primitive operation, or the meaning of a particular diagnostic) it is acceptable to ask another student, but the design and detailed method of solution must be your own work.

4. FEEDBACK FORM (2017–2018)

This handbook has been written with you in mind, and we would appreciate your feedback. This will help us when we produce next year's handbooks. You do not need to give your name. All information will be treated in confidence.

1. Your name (optional)

   _____

2. Your degree programme, eg, BA Anthropology, MA Screen Documentary, etc

   _____

3. Please indicate which year of study you are in by ticking the appropriate box

   1st ☐

   2nd ☐

   3rd ☐

   4th ☐

   other (please specify)

   _____

4. Are you (please tick the relevant box)

   ☐

a home/EU student

an international student? ☐

5. Are you (please tick the relevant box)

full-time ☐

part-time ☐

6. Please indicate how you received this handbook

included in a departmental mailing ☐

at departmental induction meeting at the beginning of term ☐

at first lecture ☐

from Personal Tutor ☐

other (please specify)

_____

7. If you are a continuing student, did you receive a copy of last year's handbook?

yes ☐

no ☐

8. If you are a student on a joint degree programme, have you also received a handbook from your other department?

yes ☐

no ☐

9. What information did this handbook not provide which you would have found useful?

_____

_____

10. What do you think this handbook does best?

_____

_____

11.   And, what do you think this handbook does least well?

_____

_____

12.   Tell us how we can improve this handbook

_____

_____

Thank you very much for your time in filling in this feedback form. Please return it to your department or post it to Quality Office, Goldsmiths, University of London, New Cross, London, SE14 6NW.

5.   APPENDICES

5.3.   APPENDIX 1: COMPLAINTS

Student Complaints

The full student complaints procedure is published on Goldsmiths' web pages:
http://www.gold.ac.uk/governance/generalregulations/studentcomplaints/

Goldsmiths recognises that things don't always go according to plan, so students must have access to an effective procedure for handling any problems that might arise during the course of their studies. The procedure helps us to resolve difficulties quickly, and to ensure that we maintain the highest possible academic and service standards.

As a student, you can help us to maintain standards by using the complaints procedure to alert us to problems as soon as these arise; we are committed to ensuring that you feel able to raise complaints secure in the knowledge that these will be fairly investigated.

Help & Support

Although the majority of problems can usually be sorted out informally by bringing the problem to the attention of the member of staff or person concerned, you may prefer to discuss your complaint with someone else, and there are a number of sources of help and support available:

Postgraduate Tutor   - provides welfare support as well as academic advice.

Senior Tutor   - Kate Devlin has overall pastoral responsibility for students in the Department, and can be contacted at k.devlin@gold.ac.uk.

Student Services   - if you'd rather discuss your difficulty with a member of staff outside the academic/service department concerned, you can get in touch with Student Services (Student Centre, Richard Hoggart Building, 020 7919 7757). Details of the specialist support provided by Student Services (including the counselling, disability and financial advice teams) can be found online: www.gold.ac.uk/student-services/

Students' Union   - GSU provides a confidential and independent advice service on welfare and academic matters; details can be found at: www.goldsmithssu.org/help/ (020 8692 1406; suadvice@gold.ac.uk).

Making a formal complaint

If you feel that informal discussion hasn't resolved your complaint, or the problem is very serious or can't be quickly resolved, then you should seek advice on making a formal complaint by contacting the Complaints & Appeals Team (appeals@gold.ac.uk) for advice on the procedure, and/or the Students' Union advice team for independent advocacy and support: www.goldsmithssu.org/help/.   Further   information   can   also   be   found   at www.gold.ac.uk/gls/studentcomplaints/.

APPENDIX 2: APPLICATION FOR REIMBURSEMENT/PAYMENT OF RESEARCH EXPENSES

Please complete this form if you intend to go to a seminar, conference, etc. and your require reimbursement from the Departmental budgets. You MUST submit this well in advance of registering for any conferences/seminars or workshops. Research students must also attach a supporting statement from their supervisor

1.   Name:

2.   Reason for application (e.g. conference expenses, travel or subsistence, equipment or training):

3.   If you are presenting a paper please state title and joint authors:

4.   Estimated Costs: (please state all the costs you wish the department to pay broken down appropriately eg fees, travel subsistence together with the total:

5.   Source: (please state whether you wish the costs to be paid from Departmental budgets or the money from subject guides or any other alternative)

6.   Have you applied for funding from other sources please give details:

7.   Are you organising a workshop?

Signed:

Date

SUPERVISION RECORD (MPhil/PhD)

This form is to be completed by the supervisor and student at the end of each supervision. A copy should be retained, a copy given to the student and a copy sent to the Department Business Manager.

NB: this form will soon be available in your student profile on the Computing intranet.

Name of Student:
Supervisor:
Date of Supervision:

Topics of meeting (studio practice, text previously submitted, other – please specify):

Issues discussed during the meeting:

Action agreed for next supervision:

Date of next supervision (if more than two months from now, briefly explain):

Signature of Student:

Signature of Supervisor(s):

APPENDIX 4: DATA SHARING ACROSS INSTITUTIONS & YOU

Data sharing between Consortium institutions

When you apply for an IGGI studentship, the higher education institutions which are members of the IGGI Consortium share the personal data\a which you have submitted in order to handle your application, and to support your studies if your application is successful.

The IGGI Consortium itself is not a legal entity, so cannot hold information or be legally responsible for it: those responsible for your personal data are the universities which hold it (known as Data Controllers), not IGGI.

The Consortium institutions have a **Data Sharing Agreement** for the Consortium's processing of personal data. This a contractual statement which defines the purposes for which they share personal data and the standards which they operate.

By accepting a study place within the IGGI Consortium, you agree to the data sharing arrangements and shared items agreed by the Consortium and made available to you: the institutions cannot amend these without at least informing you, and in many circumstances also obtaining your further consent. Information for the holders of studentships on the **use of personal information by Research Councils** is provided in section 3 of the Je-S Terms and Conditions.

Information you can expect to receive from each Consortium institution at which you study

The IGGI member institutions are legally responsible (as data controllers) for communicating to you directly how research student personal data is used at their particular institution, either when you begin your studies, or when you attend for particular elements of your programme of study at Consortium partners (unless there is no personal data collected – as might be the case when attending a single lecture). Information about the use of your personal data (sometimes known as a "fair processing notice" or "data collection notice") is often delivered through an online enrolment/registration system. Information issued by different members of the Consortium is likely to be similar in effect but not identical.

Concerns or enquiries about personal data processing

If you have concerns about the way in which your personal data is being handled by a Consortium institution you can contact the Data Protection contact at the institution concerned for advice. You should do this if:

• You suspect that the institution is using or sharing your personal data for purposes about which you have not been properly informed in writing.
• You have concerns about some other malpractice or a security breach.
• You wish to have access to the personal data which the institution holds about you, and the institution has not told you how to do this.

A list of email addresses of Data Protection contacts of the Consortium is below. Please remember that if you make statements about other people in your email (e.g. to complain about them), the individual(s) concerned may have access to that statement. If the matter cannot be resolved immediately, the Data Protection contact will let you know the appropriate complaints procedure or other process to follow (which will differ by institution). If the institution's complaints procedure has been exhausted you have the right to take your complaint to the Information Commissioner.

IGGI Consortium
Spring term 2014

APPENDIX 5: IGGI CORE MODULE DESCRIPTORS

5.3.2. Research skills for IGGI, York

The purpose of this module is to give students the skills they need to be a successful researcher in the area of IGGI. This not only includes domain specific skills but generic research skills exploiting the existing training courses available at each site. The module has two components: a research methods (RM) component and additional research skills training (RST) component, each assessed separately.

The RM component will be delivered in a two week course at York involving a week of learning and teaching and week of work on a research study, gathering data and analysing it. By the end of this component, students will be able to:

- Specify and justify a research question
- Conduct a literature search and critique papers in terms of validity and rigour
- Collect qualitative and quantitative data, including game generated data, to address a research question
- Analyse data appropriately
- Write up a study in the expected format for an academic publication

The assessment for the RM component will be a report, written in the style of a research paper, based on a study done to collect and analyse data from players playing digital games. The study could be either a quantitative study, a qualitative study or use both approaches.

The RST component is intended to support and develop the skills of the research student over the course of their entire degree. Students will take offerings from their local universities as well as specialist courses offered through the University of York. In addition we will require that all IGGI students takes part in the York Three-minute thesis competition. This is a prestigious public engagement activity where final year PhD students must provide a one slide, three minute talk on their PhD that is accessible to members of the public.

By the end of the RST component, students will be able to:

- Prepare and deliver a substantial oral presentation on their work
- Write in different styles suitable for their research community, the wider academic community and for a general public audience
- Prepare and deliver teaching materials to undergraduate and Masters students
- Engage with the public in describing and justifying their research
- Identify and address their future research training needs

The assessment from the RST will be supporting documents from the training courses attended, other events attended and other activities (eg seminars, teaching sessions) that the student has done together with a reflective essay based on the supporting documents indicating they have achieved the learning outcomes of this component. The essay should also include a plan for future research training or development.

Breakdown of time:

To be delivered in 2 x two week blocks, one in first term of first year and the second in the second term of the first year. 150 hours total

5.3.3. Game Development, Goldsmiths

Level: 7
Credits: 15
Prerequisites: None

Aims
This module is intended to provide the technical foundations necessary to develop games across a range of modern platforms and incorporating the use of AI techniques, drawing on both academic AI and industrial practice. Part 1 will focus on the fundamentals of games programming, and Part 2 on the use of AI in games development.
Learning Outcomes
On successful completion of this course, students will have demonstrated ability to develop simple games in various languages suitable for delivery in different platforms. In particular:
- Select and use different programming environments to support effective game development;
- Manage the software engineering processes to produce a digital game;
- Implement different AI approaches to produce particular game features;
- Select and apply different AI techniques to deliver important components of a game;
- The ability to work in a group to produce a small project.

Syllabus

Part 1: Games Programming
- Version control in Mercurial
- Web game programming in HTML5
- Introduction to AV programming, including graphics in Processing
- Mobile and console development, including Android programming
- Game development in Unity
- Motion control in games, including Kinect programming

Part 2: AI for Games
- Pathfinding: representation and search, hierarchical and dynamic algorithms.
- Agent architectures: state machines, behaviour trees, planning.
- Learning in games: reinforcement, TD and Q-learning.
- Procedural content generation: cellular automata, fractal generation, grammar, constraints and answer set programming.
- Bio-inspired AI: evolving content and behaviour, ANN controllers, NEAT.

Assessment
100% coursework in small groups, assessed on technical rather than design qualities. In part 1, groups will spend the second week building a complete playable game with a technology of their choice. In part 2, they will each design and develop a novel AI game agent. Both courseworks will be assessed via a group presentation and software demonstration.

Resource/Timetabling

Parts 1 and 2 will both be delivered as an intensive two week course (150 hours in total). In week 1, a daily lecture (one to two hours) will introduce a topic, with the rest of the day spent on related lab-based learning. In week 2, groups of students will work in labs on their coursework projects, supported by teaching staff.

5.3.4. Game Design, Essex

The purpose of this module is to develop the skills of the student as game designers and to bring together the design and development skills in the production of a digital game. The content of the module will be delivered in an intensive, two-week course on game design.

Although aimed at postgraduate students with a research interest in digital games, it takes a completely platform-independent approach: no computers, just games. This allows the students to experiment with game designs freely and rapidly, rather than being bogged down by the constraints of code or software development tools.

The teaching format of the module is that mornings are for theory and afternoons are for practice. In general, students will be applying in the afternoon what has been described and discussed earlier in the day.

Upon completion of this module, it is expected that students will be able to:

1. Design non-trivial games on any subject.
2. Explain what players find fun about games.
3. Describe gameplay using terms designers use.
4. Integrate stories and gameplay.
5. Express meaningful criticism of game designs.

Assessment will be a two-week group game development conducted at the end of the year to allow students to bring together all of the skills acquired in the first year. The students, working in groups of three or four, will produce a playable prototype game based on a theme relevant to the scientific, social or cultural challenges that IGGI is addressing and incorporating an AI technique in a necessary and effective way. The games will be assessed by academics and commercial partners playing the games, presentation and code.

Resource/Timetabling

Parts 1 and 2 will both be delivered as an intensive two week course (150 hours in total). In part 1, a daily lecture (one to two hours) will introduce a topic, with the rest of the day spent on related lab-based learning. In part 2, groups of students will work in labs on their coursework projects, supported by teaching staff.

This handbook is for students on Mphil/PhD Intelligent Games & Game Intelligence programme in the Department of Computing.

2017-18

Goldsmiths, University of London
New Cross
London SE14 6NW
Tel 020 7919 7171
www.gold.ac.uk