



GAM705 FINAL MAJOR PROJECT Handbook

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Chapter 1

Introduction

You are required to deliver a major **research project** as part of your Masters degree; in the form of **empirical** or **practice-based** research relating to your specialism. Individually, you will explore a field that interests you, and for which there is a clearly identified need.

The higher level aim for this module is to support you on your journey through a research project that has the potential to contribute new knowledge in a chosen field of study, produce an artefact that is of publishable quality, and develop your personal portfolio in a way that supports your future aspirations. The very strongest projects in the past have been submitted and accepted for publication in international conferences or led to further funding and business start-up.

Selecting a project

Your **project supervisor** is responsible for giving you guidance and feedback throughout your project, through regular group and individual supervision meetings.

Every potential supervisor has their own area of expertise and research interests, and has suggested several possible project titles. These are available here:

https://www.falmouth.ac.uk/staff-profiles/?field_department_target_id_selective=34458

You are required propose your own project title within your field of expertise. One of the few restrictions on the project topic is that it must allow you to develop some form of **artefact** as this is a component of the assessment. This doesn't have to be a single artefact, it could be a series of experiments or artefacts that form a coherent portfolio. Your supervisor can advise on what would constitute a relevant and suitable artefact for your project.

Module overview

For this module, you are required to complete one assignment, composed of two parts: a proposal **pitch** and an **artefact**.

GAM705 Final Major Project: Proposal (20%)

Your **proposal pitch** will present your project concept and disseminate your initial research and experimentation. In delivering this proposal pitch you will evidence a familiarity with the wider context of your project, how it relates to the relevant academic literature and the value of the work to be carried out. You are also required to address the ethical issues surrounding your project, and justify your proposed research methods accordingly. A plan should be present that shows you have thought about the time constraints of the module, potential blockers that might hinder development and the milestones that will ensure project delivery.

You will be provided with a template to help shape the proposal but you **should** adapt it to suit the requirements of your project.

GAM705: Final Major Project: Artefact (80%)

The nature of the artefact will vary dramatically between individuals. However, your work will be assessed on the same shared criteria of viability, design, innovation, functional coherence, quality of defence. This set of criteria have been selected for their transferability and may have slightly different meaning depending on your specialism. For instance, software design usually refers to the planning and implementation of code. Whereas, user experience design will include considerations for the user journey and the perceived usability of an artefact. It is critically important to recognise that in this project you **must** evidence an iterative process and document your critical thinking. It is your choice how you document your process but tools such as blogs, version control, design portfolios, sketchbooks and many others can be used. When it comes to assessment, it is vital that the assessor is able to identify how your project has developed from initial concept, through a series of prototypes and arrived at the final deliverable.

Assessment weighting

This module constitutes a total of 60 credits and is double the weighting of past modules. In this module, the proposal is worth 20% of the marks, and the Final Major Project artefact 80%.

Chapter 2

Guidance on Completing your Project

Ethical Clearance

All students must follow Falmouth University's Research Ethics Policy. In practice, this means you may need to complete the Research Ethics Approval Application Form and obtain ethical clearance **before** using the research artefact you have created to collect primary data. Even if collecting such data presents minimal to no risk. Furthermore, if your project involves human participants (e.g. for testing a game system you have developed), or presents a significant ethical risk (e.g., systems that process personal data) then you will need to have completed the full Research Ethics Approval Application Form available on the Falmouth Integrity & Ethics page linked below. You **should** discuss matters of an ethical nature with your research supervisor and pay particular attention to how you address these issues in your research methodology. The ethics form should be submitted as part of the final artefact submission.

Read more about Falmouth University's Integrity and Ethics policy here: <https://www.falmouth.ac.uk/research/research-ethics-integrity>

Project Management

The final major project can be quite a daunting and intimidating prospect. Many students find it challenging because of its self-directed nature and the accompanying discipline and dedication needed to follow it through. However, do not worry! Completing the project is not only intellectually liberating and a mark of your academic independence, but will provide you with a sense of achievement and satisfaction.

It will also constitute an key indicator—a symbol—of your competence to potential employers. It gives you something you can showcase in interview and discuss in considerable depth and with enthusiasm. Successful completion of such a project demands a mastery of core employability skills including: initiative; problem solving; communication, both written and spoken; self-regulated learning; as well as planning and management. Though the stretching of your ability in these areas to limits you never thought possible will likely be rather uncomfortable, you feel better for it when you graduate.

A pitfall that many students fall into, however, is time management. Minimise your procrastination and try to chip away at your work a little every day! Although your milestones will vary depending on the nature of your project, ideally the research artefact should be near its completion towards week 10 of the module. Be sure to document, organise and reflect on your process as you go. Do not underestimate the value of this process!

It is critically important that you consider **project management** again at this stage. Consider an artefact development life-cycle that is appropriate to your project. Ensure you use appropriate project management tools including critical path analysis, Gantt charts, and burn-down charts to keep track of your progress. Also, do not underestimate the importance of the **validation and verification** aspect of the research artefact. Where applicable, you must ensure sufficient time is made to enact quality assurance practices that will defend the integrity of your research by showing that your research project was appropriately managed and your artefact

was constructed through the sound application of pipelines and processes applicable to your specialism.

If you encounter any issues with respect to your time management, please consult your supervisor who can provide you with advice. They are there to support you, so take advantage of their experience. Also, ensure that you take advantage of the support services offered by the Academic Skills Team (ASK): <http://ask.fxpplus.ac.uk>

Chapter 3

Assignment Structure for the Final Major Project

Introduction

The Final Major project consists of two distinct assignments: the proposal pitch and the final artefact. The first assignment should be used to inform your approach to the second assignment and therefore, should be given significant attention.

Both assignments can be broken down into a series of interrelated steps:

- (A) **Conceive** of a topic for your project, by:
 - (i) **reviewing** the academic literature **in addition to** the state-of-the-art
 - (ii) **and deriving** a key question or problem from the review to motivate your work
- (B) **Deliver** a 10-minute proposal pitch that will:
 - (i) **Utilises** the example proposal structure in manner appropriate to your project
 - (ii) **explain** the context of your project
 - (iii) **identify** and **discuss** the academic literature relevant to your project
 - (iv) **propose** one or more questions for underpin your project
 - (v) **articulate** the ethical considerations you have made
 - (vi) **illustrate** your approach to project planning and management
- (C) **Formalise** a final proposal that will:
 - (i) **address** any issues raised in the proposal pitch
- (D) **Iterate** across the prototype fidelity continuum:
 - (i) **facilitate** the collection of empirical data for your project
 - (ii) **demonstrate** the technical feasibility of your proposed artefact
 - (iii) **provide** a basis for further development and experimentation as you progress through the module
- (E) **Complete** your final Major Project artefact, ensuring that you:
 - (i) **apply** a rigorous project management approach;
 - (ii) **follow** best practices in your particular field of specialism;
 - (iii) **and clearly demonstrate**, where appropriate, validation, verification, testing, and refactoring;
- (F) **Deliver** a 10-minute presentation that will:
 - (i) **showcase** the final artefact;
 - (ii) and **defend** the work carried out through Q&A in a viva context.

Part A

Part A consists of a **single formative** submission.

To complete Part A, carry out some preliminary research and experimentation to inform your initial Final Major Project proposal. Lock down a rough research topic or question to drive the project development. Share your

initial thoughts with peers and faculty by posting a summary on the associated Learning Space discussion forum. You will receive **informal feedback**.

This should be done within the first week of the module.

Part B

Part B consists of a **single summative submission**. This work is **individual** and will be assessed on a **criterion** basis as defined in the rubric below. To pass, complete the template format. Each project will have very different requirements so you may need to adapt the template to suit your needs.

Suggested Template:

1. title page
2. overview
3. user description, including personas
4. storyboards of user experience
5. prototypes
6. features and functionality
7. the justification for design (theoretical and practical)
8. results of preliminary testing
9. shortcomings of design
10. expansion – stretch goals
11. next steps in the design process
12. summary

Some higher level questions for you to consider:

- (i) What is the context of your project? How does it fit into your specific field?
- (ii) What are the key results from the literature upon which your project will be built?
- (iii) What is the current state of knowledge in the field. What are the open questions and challenges?
- (iv) What is (are) the key research question(s) that you will seek to answer in your project?
- (v) What are the key legal, social, ethical, and/or professional issues associated with your project?

To complete Part B, prepare a 10 minute presentation and deliver it in the scheduled session. Prepare your slides using your choice of presentation software (e.g. Beamer, reveal.js, PowerPoint).

You will receive immediate **informal feedback** from your tutor and **formal feedback** within three weeks of the proposal pitch delivery.

Part C

Part C consists of a **single formative submission**.

To complete this step, improve upon the proposal document based on the informal feedback from the proposal pitch. You will be expected to provide this document in your first research supervision meeting.

You will receive immediate **informal feedback** from your supervisor.

Part D

Part D consists of a **multiple formative submissions**.

To complete Part D, carry out an extensive research and development project using industry standard project management principles and techniques. You will receive regular **informal feedback** about your work through meetings with your supervisor. Iteratively improve the research artefact and show it to your research supervisor in a timetabled meeting. As the requirements for the research artefact will vary by project, consult with your supervisor to verify whether or not the artefact is adequate for the desired purpose.

Part E

Part E consists of a **single summative submission** that feeds into part E.

To complete part E, upload a .zip file containing the final version of your artefact and any assets/dependencies to the LearningSpace. If the files in question are too large for upload, seek advice from your supervisor.

Note that LearningSpace will only accept a single .zip file.

This work is **individual** and will be assessed on a **holistic** basis, according to the descriptors set out at the end of this document. You will receive **formal feedback** three weeks after the summative deadline.

Part F

Part F consists of a **single summative submission**. This work is **individual** and will be assessed on a **threshold** basis. To pass, answer the following questions:

- (i) What was the purpose of your project?
- (ii) How did you approach the project?
- (iii) What did you discover?
- (iv) What are the implications/value of the work?

To complete Part F, prepare a 10-minute presentation in the timetabled session after the submission deadline. Prepare your slides using your choice of presentation software (e.g. Beamer, reveal.js, PowerPoint).

You will receive immediate **informal feedback** from tutors.

FAQ

- **What is the deadline for this assignment?**
Falmouth University policy states that deadlines must only be specified on the MyFalmouth system.
- **What should I do to seek help?**
You can email your tutor for informal clarifications. For informal feedback, make a pull request on GitHub.
- **Is this a mistake?**
If you have discovered an issue with the brief itself, notify the module leader.

Chapter 4

Marking Descriptors

Note that the assignments which constitute your Final Major Project are **not** marked in a criterion-based fashion. Instead, your project supervisor will assign an overall grade by considering the following descriptors in relation to your project.

You **must** demonstrate success at every learning outcome in order to pass.

GAM705 Research Proposal (20%)

Criterion	Weight	Refer for Resubmission	Pass (50-59%)	Merit (60-69%)	Distinction 70-100%
Communication Skills	20%	There is no presentation There is no structure to the presentation The presentation delivery is chaotic and with very little substance to the discussion There are no visuals to support the discussion	A research topic has been identified The presentation has an appropriate structure The presentation delivery is clear and concise Some visuals are used to underpin the discussion	A research topic has been outlined with clarity The presentation has an appropriate structure and flow the presentation is delivered with clarity and enthusiasm Visuals are used to underpin the discussion	A research topic has been outlined with clarity and in a persuasive manner The presentation structure and flow are of a publishable quality the presentation is delivered in a confident and professional manner High quality visuals are used to underpin the discussion
Innovation and Flair	20%	The proposal concept is not innovative There is no evidence of divergent and/or subversive thinking The value/opportunity has not been identified There is no USP	The proposal concept is slightly innovative There is some evidence of divergent and/or subversive thinking The value/opportunity has been identified A USP has been identified but with very little justification	The proposal is reasonably innovative There is reasonable evidence of divergent and/or subversive thinking The value/opportunity has been identified with clarity and justified A USP has been identified with a reasonable justification	The proposal concept is highly innovative There is considerable evidence of divergent and/or subversive thinking The value/opportunity has been identified with clarity and persuasively justified A USP has been identified and justified persuasively
Research	20%	There is no reference to the relevant academic research There is no market/audience research	There is some reference to the relevant academic research There is some market/audience research The research is sometimes used to support the discussion	There is an appropriate amount of references to the relevant academic research There is an appropriate amount market/audience research The research is used to support the discussion throughout	The relevant academic research is acknowledge throughout creating a authoritative tone There is considerable market/audience research The research is underpins every aspect of the discussion
Feasability	20%	There is no consideration for scope There is no consideration for the pipelines and tools that will support the development There is no plan or consideration for development life-cycle There is no consideration for how success is measured	There some consideration for scope There is some consideration for the pipelines and tools that will support the development There is a basic plan and consideration for development life-cycle There is some consideration for how success is measured	The project has been scoped appropriately The appropriate pipelines and tools that will support the development have been identified There is a detailed plan and consideration for development life-cycle There is clear methodology for how success is measured	The project has been scoped appropriately There appropriate pipelines and tools that will support the development have been identified There is evidence of a skills audit to ensure a balance between expectation and reality There is evidence of rigorous planning and estimation utilising industry standard principles and techniques for project management There is clear methodology for how success is measured
Depth of Insight	20%	The proposal contains no insight The proposal raises more questions than it answers There are considerable omissions	The proposal contains some insight The proposal provides enough insight to communicate the concept and project development There are no obvious omissions	The proposal contains some insight The proposal provides enough insight to communicate the concept and project development There are no obvious omissions	The proposal contains much insight The proposal provides comprehensive insight into the concept and project development There are no obvious omissions

GAM705 Artefact (80%)

Criterion	Weight	Refer for Resubmission	Pass (50-59%)	Merit (60-69%)	Distinction 70-100%
Innovation	20%	<p>The artefact is not innovative</p> <p>There is no evidence of divergent and/or subversive thinking</p> <p>The artefact has no clear value for the intended audience</p> <p>There is no USP</p>	<p>The artefact is slightly innovative</p> <p>There is some evidence of divergent and/or subversive thinking</p> <p>The artefact has a value for the intended audience</p> <p>there is evidence of a potential USP</p>	<p>The artefact is reasonably innovative</p> <p>There is reasonable evidence of divergent and/or subversive thinking</p> <p>The artefact has much value for the intended audience</p> <p>There is a clear USP</p>	<p>The artefact is highly innovative</p> <p>There is considerable evidence of divergent and/or subversive thinking</p> <p>The artefact has considerable value for the intended audience</p> <p>There is a clear USP</p>
Viability	20%	<p>There is no functioning artefact</p> <p>There is no plan for dissemination</p> <p>There is no attempt to measure success</p> <p>There is no plan for future enhancements</p>	<p>There is a functioning artefact that could be considered an MVP</p> <p>There is a basic plan for dissemination</p> <p>There is an attempt to measure success</p> <p>There is a plan for future enhancements</p>	<p>There is a functioning artefact that goes beyond MVP</p> <p>There is a reasonable plan for dissemination</p> <p>There is evidence of measuring success using the appropriate methodology</p> <p>There is a robust plan for future enhancements</p>	<p>There is a fully formed artefact that goes well beyond MVP</p> <p>There is a extensive plan for dissemination</p> <p>Success has been measured using the appropriate methodology and the results have been used to inform...</p> <p>An extensive plan for future enhancements</p>
Design	20%	<p>There is no evidence of a design process</p> <p>There is no evidence of critical making</p> <p>Appropriate design principles and processes have not been applied to the project development</p>	<p>There is some evidence of a design process</p> <p>There is some evidence of critical making</p> <p>Appropriate design principles and processes have been applied to the project development</p>	<p>There is much evidence of a design process</p> <p>There is much evidence of critical making</p> <p>Appropriate design principles and processes have been applied to the project development</p> <p>The artefact evidences divergent practice</p>	<p>There is considerable evidence of a design process</p> <p>There is considerable evidence of critical making</p> <p>Appropriate design principles and processes have been applied to the project development</p> <p>The artefact evidences considerable divergent practice and pushes the boundaries of the particular specialism</p>
Functionality	20%	<p>The artefact does not function as intended</p> <p>There are critical/major issues with the artefact</p> <p>The artefact does not meet the needs of the intended audience</p>	<p>The artefact functions as intended</p> <p>There are some minor issues in the artefact</p> <p>The artefact meets the needs of the intended audience</p>	<p>The artefact functions as intended</p> <p>There are very few issues in the artefact</p> <p>The artefact meets the needs of the intended audience</p>	<p>The artefact functions as intended</p> <p>There are no issues in the artefact</p> <p>The artefact meets the needs of the intended audience as evidences by appropriate testing methodology</p>
Defense	20%	<p>The student did not attend the viva</p> <p>There is evidence of academic misconduct</p> <p>There is little or no work to defend</p>	<p>There is enough work to showcase</p> <p>There is some awareness of the wider research field in which the work is situated</p> <p>The student provides some justification for their approach</p> <p>The student is able to provide basic responses to questions about their work</p>	<p>There is an adequate body of work</p> <p>There is a good awareness of the wider research field in which the work is situated</p> <p>The student provides adequate justification for their approach</p> <p>The student is able to provide detailed responses to questions about their work</p>	<p>There is an extensive body of work</p> <p>There is a considerable awareness of the wider research field in which the work is situated</p> <p>The student provides considerable justification for their approach</p> <p>The student is able to provide detailed responses to questions about their work informed by their research and experimentation</p>