Module Handbook 2017/18

**Module Nam**e: Digital Systems Project

Module Code: UFCFXK-30-3

Module Leader Name: Dr Theodoros (Theo) Spyridopoulos



**Aims of the Handbook**

The handbook is a guide for students in the Department of Computer Science and Creative Technologies that undertake the UFCFXK-30-3 Digital Systems Project module. The information in the handbook can also be found in a number of other electronic or paper sources and the document provides links to the definitive data sources wherever possible.

Please note that the electronic version of the handbook will be kept up to date and you will be notified of any significant changes. If you have taken a hard copy of any information please remember to refer back to the electronic version to ensure that you are working with the most up to date information.

**Contents**

[1. Module team information 4](#_Toc493163734)

[2. Module enhancement 5](#_Toc493163735)

[3. Module specific information 5](#_Toc493163736)

[3.1 Aims and Learning Outcomes of the Module 5](#_Toc493163737)

[3.2 What is a Project? 6](#_Toc493163738)

[3.3 The role of the supervisor – Student responsibilities 7](#_Toc493163739)

[3.4 Selecting a topic – Supervisor allocation 9](#_Toc493163740)

[3.5 Experiencing problems with the supervisor 11](#_Toc493163741)

[3.6 Ethics 11](#_Toc493163742)

[3.7 Project report 11](#_Toc493163743)

[3.7.1 Research/Literature review 11](#_Toc493163744)

[3.7.2 Requirements 12](#_Toc493163745)

[3.7.3 Methodology 12](#_Toc493163746)

[3.7.4 Design 13](#_Toc493163747)

[3.7.5 Implementation and Testing 13](#_Toc493163748)

[3.7.6 Evaluation 14](#_Toc493163749)

[3.7.7 Formatting 14](#_Toc493163750)

[3.7.8 Structure 14](#_Toc493163751)

[3.8 Project in Progress poster and viva including demonstration 15](#_Toc493163752)

[4. Module Schedule - Key dates 16](#_Toc493163753)

[5. Material to be submitted 18](#_Toc493163754)

[5.1 Formal Project Proposal form 18](#_Toc493163755)

[5.2 Ethical Review Checklist form 18](#_Toc493163756)

[5.3 Project in Progress Poster 18](#_Toc493163757)

[5.4 Project Report 19](#_Toc493163758)

[5.5 Viva including a demo 19](#_Toc493163759)

[6. Submissions details 21](#_Toc493163760)

[7. Additional information and reading lists 24](#_Toc493163761)

[8. Communication 25](#_Toc493163762)

[9. Advice and support 26](#_Toc493163763)

[10. References 27](#_Toc493163764)

[11. APPENDIX A 28](#_Toc493163765)

[12. APPENDIX B 29](#_Toc493163766)

# Module team information

Module Leader name: Dr Theodoros (Theo) Spyridopoulos

Module Team (this list can be updated; please check on Blackboard under the Contacts section for the latest version of the list of tutors):

|  |  |
| --- | --- |
| Rakib, Abdur | Rakib.Abdur@uwe.ac.uk |
| Panagiotis (Panos), Andriotis | Panagiotis.Andriotis@uwe.ac.uk |
| Abdullahi, Arabo | Abdullahi.Arabo@uwe.ac.uk |
| Mehmet, Aydin | Mehmet.Aydin@uwe.ac.uk |
| Jane, Berry | Jane.Berry@uwe.ac.uk |
| Craig, Duffy | Craig.Duffy@uwe.ac.uk |
| Benedict (Ben), Gaster | Benedict.Gaster@uwe.ac.uk |
| Essam, Ghadafi | Essam.Ghadafi@uwe.ac.uk |
| Lindsey, Gillies | Lindsey.Gillies@uwe.ac.uk |
| Stewart, Green | Stewart.Green@uwe.ac.uk |
| Ian, Johnson | Ian.Johnson@uwe.ac.uk |
| Zaheer, Khan | Zaheer2.Khan@uwe.ac.uk |
| Phil, Legg | Phil.Legg@uwe.ac.uk |
| Shancang, Li | Shancang.Li@uwe.ac.uk |
| Elias, Pimenidis | Elias.Pimenidis@uwe.ac.uk |
| Nathan, Renney | Nathan.Renney@uwe.ac.uk |
| Martin, Serpell | Martin2.Serpell@uwe.ac.uk |
| Chris, Simons | Chris.Simons@uwe.ac.uk |
| Theo, Spyridopoulos | Theo.Spyridopoulos@uwe.ac.uk |
| Frazer, Barnes | Frazer.Barnes@uwe.ac.uk |

External examiners from other institutions are appointed to each module to act independently and work with the module team in the management of threshold academic standards. The external examiner appointed to this module can be found at <http://www2.uwe.ac.uk/services/Marketing/about-us/cas/Extnl_Exam_Allocation_to_Mods.pdf>

# Module enhancement

This is the first year that his module is run. It is the result of the transition from the Computing Project module to the current Digital Systems Project module.

# Module specific information

The purpose of this document is to provide students with a set of guidelines to direct and support work from topic selection through to completion of a Final Year Digital Systems Project. The project comprises 30 credits of Level 3 work within the University’s modular scheme and contributes to the computer science and creative technologies related programmes in the Faculty. You can find the module specification in the following link:

<https://secure.uwe.ac.uk/fet/coursesuwe/modules/uweModuleCode.asp?ModuleCode=UFCFXK-30-3>

## Aims and Learning Outcomes of the Module

This is an **individual project**. It provides the opportunity for the student to learn independently, and to develop and apply the skills necessary for an extended technical project.

Students select and investigate a topic **beyond the normal level of treatment** in the taught modules, resulting in a **hardware and/or software artefact**. The subject of the project will be agreed between the student and the supervisor, and may stem from a variety of sources; for example, a member of staff, the student, the student’s employer or from an outside organisation. It must involve research, followed by the development of a hardware and/or software artefact using appropriate method(s)/tool(s). Whatever the subject, the student will be expected to treat material critically, to demonstrate their understanding of the relevance of material and to reflect upon the tools and methodologies used.

On successful completion of this module students will be able to:

1. Independently research a comprehensive body of knowledge in a chosen subject.
2. Develop a hardware/software artefact by selecting appropriate approaches/methods for its realisation and construction.
3. Identify and communicate knowledge of the development approaches/methods and their application.
4. Demonstrate analytical, critical and reflective skills.
5. Demonstrate informed reporting skills via research and critical evaluation of appropriate academic, commercial and anecdotal literature.

Each student will identify (or be assigned to) a supervisor who will meet regularly with the student to help plan and manage the work. Wherever possible students will be assigned a supervisor with an interest in the project topic, but this cannot be guaranteed (more information on how to choose a topic and a supervisor is provided in Section 3.4 ). The responsibilities of the supervisor are primarily to provide guidance on the management of the project, the standard of work required, what can realistically be achieved in the available time and to give feedback on work done (including the writing of the report). More information on the role of the supervisor is provided in Section 3.3

At the beginning of the academic year in which the project is undertaken, a short series of lectures will provide the student with the context in which the project is to be undertaken, addressing areas such as choosing a project topic, researching the project idea, making use of your supervisor and writing up the project. More information on the lectures is provided in Section 4. ; additional material will be provided after the end of each lecture on Blackboard.

Each student will have to:

* Submit a **project proposal** with the name of the supervisor.
* Submit an **ethics form**.
* Submit a **Poster** and **meeting logs** that will be presented on the Project in Progress day.
* Submit a **Project Report**.
* Present their project in a short **Viva** held by their supervisor and a second marker.

More information about the submissions is provided in Sections 5. and 6.

Besides being often critical to the classification of the student’s degree, the project is also an opportunity for the students to showcase their skills to potential employers. In most job interviews, interviewers spent much time talking with the candidates about their final year project since it provides much information on the candidate’s analytical, technical and reflective skills. Thus, a good project can be a major advantage in a student’s career.

## What is a Project?

*“The computing project you embark upon gives* ***you*** *an opportunity to make your* ***own*** *contribution. There is little point in doing a project that merely regurgitates the work of others. Your own thoughts, ideas, and developments* ***are*** *important and these are what people reading your report are interested in.”*

(Dawson 2015)

Looked at from a high level the component parts of a typical project report would include the following sequence of sections:

* Here is a problem
* This is why it’s important
* Here’s how other people have tried to solve it
* Here’s what I’m going to do
* This is how I’ll know I’ve succeeded
* This is how I’m going to do it
* What I actually did
* Here it is: does it solve the problem?
* This is what I have learnt

Two very useful books are:

Dawson, C. (2015) Projects in Computing and Information Systems: A Student's Guide, 3rd

ed. Harlow: Pearson

Weaver, P. (2004) Success in Your Project: A Guide to Student Systems Development

Projects, Harlow: Prentice-Hall

## The role of the supervisor – Student responsibilities

*The role of the supervisor*

Each student will be allocated a project supervisor (Section 3.4 describes the selection process), a member of staff who will perform the roles of teacher, advisor, mentor, critic and manager in various proportions. The role of the supervisor is to assist the student by providing advice and guidance on how to prepare, produce and improve their project. Specifically, project **supervisors can be expected to**:

* provide **advice** on choosing a suitable topic and refining the aims and scope of the project;
* provide **assistance** in project planning;
* provide **guidance** on the literature review;
* **suggest** sources of information and/or contacts;
* provide **advice** on using suitable research methods, including any necessary ethics approval;
* **advice** on the structure of the work;
* **advice** on methods for improving the presentation of the piece of work (illustrations, tables, appendices etc.);
* **read and comment** on draft material (max: 2 project drafts and/or multiple section drafts; cut off time for reading of work: 4 weeks – the student is responsible to contact the supervisor and agree on a timetable, see below for further information about the student’s responsibilities), and clarify any particular expectations they might have, with respect for example to the timing of the submission of drafts;
* **respond to email** contact;
* **meet the student** upon the student’s request and/or according to the pattern they have already established (the student is responsible to contact the supervisor – see below; frequency of meetings: ideally, weekly individual or group meetings of up to 1 hour);
* **keep a record of meetings** with students, with brief details of what discussed and any proposals made, as well as any outcomes of the meeting;
* **ensure ethics approval** has been obtained to undertake the research in good time (deadline for ethical review checklist form submission: see key dates in Section 4. and submission details in Section 6. ), that an appropriate risk assessment is in place, and that the research complies with governance requirements (see <http://www1.uwe.ac.uk/research/researchethics/policyandprocedures.aspx>);
* **act as a marker** of the final poster, report and demo (a second marker is also assigned).

Project supervisors **are not expected to**:

* collect data for the student, analyse it or write it up;
* direct the research;
* produce code for the student or resolve coding issues (since the supervisor acts as a first marker as well); students can always make use of the expresso programming sessions and/or seek help from other tutors and/or students;
* ensure that work is of sufficient quality to pass; this is the student’s responsibility;
* provide any guidance or advice during the marking process (e.g. during the viva/ demonstration).

Since the supervisor is also the first marker of the project, his/her role is to provide guidance and advice for improvement without expressing any opinion on the quality of work. **Any opinion expressed by the supervisor relating to the quality of the work should not be taken to represent the opinion of other markers**.

The project supervisor has a timetable allocation for this task and the student should make good use of this personal tuition. Members of staff vary widely in their backgrounds and current interests. We would like to encourage students to refer to any staff member, especially the technical staff, or other students for expert advice when appropriate.

*Responsibilities of the student*

Undertaking a project involves a different way of working for a student as compared to studying a taught module, as it is designed to be an independent piece of work and the supervisor will not be directing the student’s studies. The student is in the driving seat and should aim to take ownership of the process and the piece of work. In particular the student is expected to:

* **initiate contact** with their supervisor as soon as possible;
* agree a **timetable** for completion of the work, including the **pattern and frequency of meetings** (ideally, weekly individual or group meetings of up to 1 hour), the nature of **communication** and the submission of **drafts** (max: 2 drafts; cut off time for reading of work: 4 weeks), as well as the procedures for **rescheduling meetings** should these be cancelled for any reason;
* identify an appropriate **topic** and to formulate a **proposal** and, under the guidance from their supervisor, refine this topic into an underlying research question to be answered;
* submit **draft sections** of their work for comment by their supervisor; the onus is always on the student, and not the supervisor, to **initiate contact**;
* **maintain contact** with their supervisors and seek assistance through email exchange, Skype, telephone or face to face meetings;
* take **responsibility** for their own research and to work **independently**, with the support of the supervisor;
* take **responsibility** for the good conduct of their **research**, under the guidance and with the advice of the supervisor;
* keep a **progress log**, documenting the outcomes of meetings and recording activities;
* conduct themselves in a **professional** and courteous manner in all meetings and correspondence.

## Selecting a topic – Supervisor allocation

The Digital Systems project module is an opportunity for the student to explore a topic or problem of personal interest in an environment supportive to intellectual enquiry. The task of topic selection is very important since it defines and directs the rest of the project development. Identifying a good topic and approach can be key to your success on the module. The topic may stem from the student’s own interests, perhaps developed from placement or other prior experience, or from the research interests of staff, or from ideas about areas to investigate with a view to employment. Individual projects have to be related to the degree programme the student is registered to.

In trying to identify a viable and appropriate topic for your own project, ask yourself the following questions:

* Is there a reasonably current literature base to get started? Past projects can provide useful leads in the early stages of searching for relevant academic literature.
* Is the topic relevant, timely and interesting? The piece of advice most consistently offered by past students is to choose something that you are interested in.
* Is the scope narrow enough to permit some depth of analysis? It is harder to get a good mark if the topic area is very broad.

During the first four weeks of term (induction week 9 - week 12) students should **discuss project ideas with staff members** (**it is the students’ responsibility to contact staff members** - please check Blackboard under the tab “Contacts” for staff that are involved in this module); further discussion on the process of project selection will be done **during the lectures** within the first three weeks, as shown in the module schedule (see Section 4. ). The tutors involved in this module have also provided some project ideas on Blackboard under the tab “Contacts”.

**Project selection coexists with and depends on the selection of supervisor**. **The student is responsible for finding a supervisor**. This can come as a result of the student discussing their ideas with staff. Each student must use the online tool (<https://secure.uwe.ac.uk/fet/studentprojects/assignment.asp?AssignmentID=17> ) to submit their idea (that have discussed or will discuss with staff) and propose a supervisor. The proposed supervisor can then discuss with the student the idea and/or either accept or reject the project proposal. If the proposal is rejected then the student is responsible to find another supervisor (again using the online tool). During this period (week 9 - week 12) the student can still discuss with other staff members, about the same or other ideas. If/When the supervisor accepts the project proposal, the student can then move on submitting the formal project proposal on Blackboard (see key dates on module schedule). If the supervisor rejects the project proposal before the deadline (week 12 on Thursday 2pm), then the student can modify the idea (or find a new idea) and select another supervisor. If the student cannot find a supervisor before the deadline, then a supervisor is randomly allocated. The student then needs to discuss with the allocated supervisor the topic of the project and submit the formal project proposal on Blackboard.

Please note that there is a limited number of students that each tutor can supervise, therefore a “first come first served” process is followed. Some supervisors “fill up” very early, therefore you need to be quick and have viable proposals to be able to secure them. Once you have a draft proposal you can select your chosen supervisor using the online tool (<https://secure.uwe.ac.uk/fet/studentprojects/assignment.asp?AssignmentID=17>). Figure 3.1 provides a short description of the whole process.

**All students should have a supervisor by the week 12 (Thursday 2pm)! A supervisor will be randomly allocated to students without a supervisor! All students should submit a formal project proposal by week 13 (Thursday 2pm) on Blackboard!**

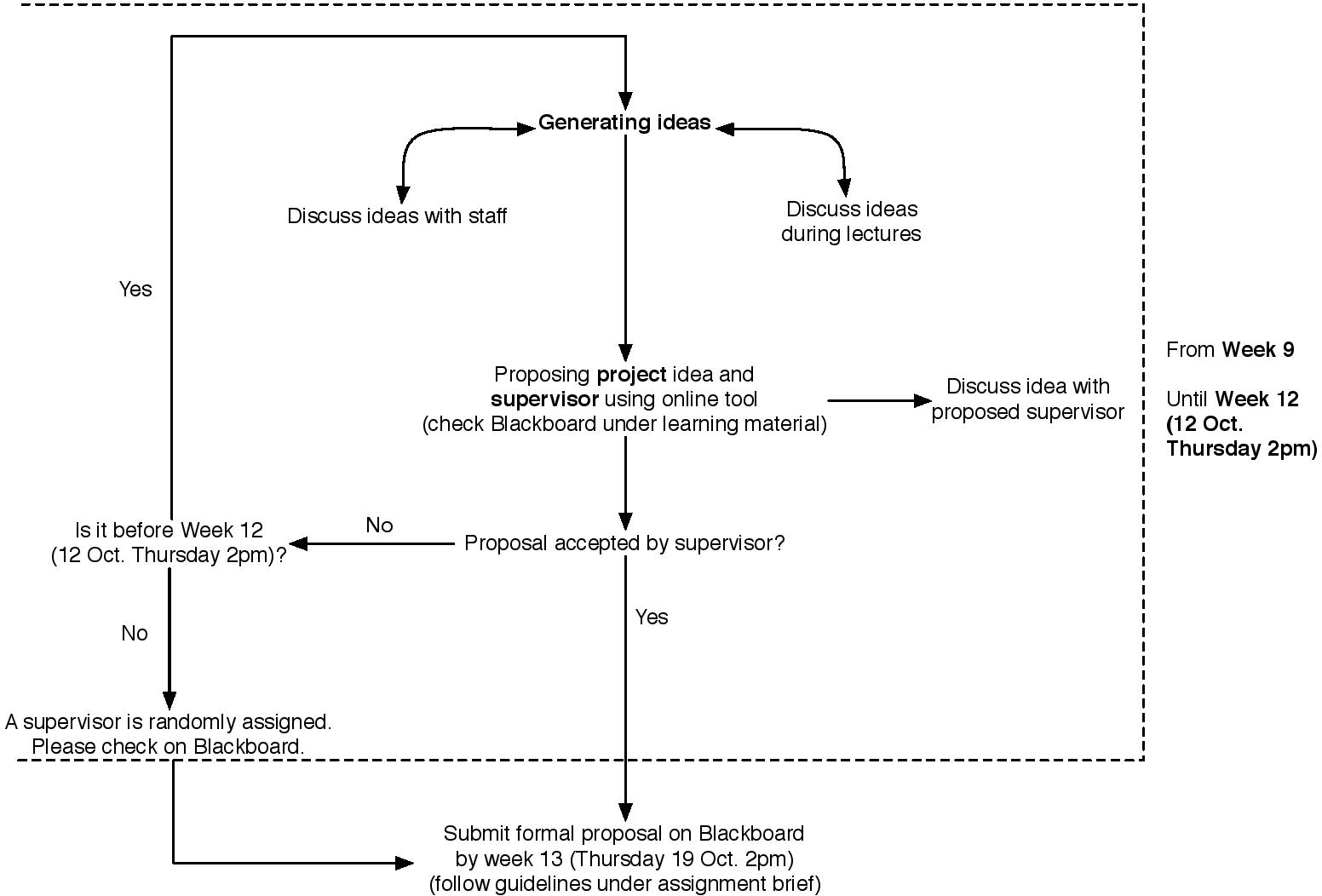


Figure 3.1 Selecting project and supervisor.

## Experiencing problems with the supervisor

If students experience problems in their working relationship with their supervisor, they should try to talk to them about it in the first instance. If this feels too difficult, they should discuss the matter with the Module Leader, the Academic Personal Tutor (APT) or Head of Department. If a student experiences difficulty in contacting their supervisor, they should contact the module leader or Head of Department.

## Ethics

After the submission of the project proposal, students are required to discuss with their supervisor the ethical implications that their project may entail. An **Ethical Review Checklist** form must be submitted on Blackboard as a result from this discussion. The template of this form is provided on Blackboard under the Learning Material tab. The deadline for the submission of the Ethical Review Checklist form is on Week 14 (26 October 2pm).

## Project report

### Research/Literature review

Early work on the project is likely to focus on identifying relevant academic literature and other sources of information. Students are expected to use the full range of literature resources available through UWE Library Services.

It is important, right from the start, that you keep track of full references for all the material that you collect and any notes that you make from published sources, including the internet. Use the web pages in the Library’s iSkillZone to access detailed guidance explaining exactly how you should use the **UWE Harvard standard** to cite references within the text of your project and how to produce an ordered list of complete bibliographic references for your sources. You should not use footnotes for this purpose. Presenting the words or ideas of other people as if they were your own, i.e. without citing their source, is known as plagiarism and is a serious assessment offence. Both Cornford & Smithson (2006) and Turabian (2007) contain further advice about when, as well as how, to cite references.

Students are expected to devote approximately 10 hours per week to work on the project. This effort is best distributed as evenly as possible and suspending work on the project to concentrate on other assessments is strongly discouraged. You should meet your supervisor regularly and take full advantage of the supervision sessions available, many of which will take the form of small group sessions initially. You are expected to create a project plan and to keep a weekly log of activities and time spent on the project. Logs need to be presented on the Project in Progress date.

Further details and reading material around research is provided on **Blackboard**. Please check the **Learning Material** section.

### Requirements

A vital role in the development of a project is played by the requirements analysis. Clear and well-defined requirements can help developers identify objectives in their work and test the final product. The final product will need to address these requirements.

Students are expected to provide both functional and non-functional requirements as part of their project. A limited number of requirements is asked (10 functional and 10 non-functional requirements) to make the project viable in the context of a 30 credits module; in real life requirements can be more in number. However, no marks will be deducted in case a project has more than 10 functional or non-functional requirements (if all requirements are clear and well defined).

Students should consult their supervisors on how to form the requirements.

Further information and reading material around requirements is provided on **Blackboard**. Please check the **Learning Material** section.

### Methodology

Defining the methodology that the project development will follow is very important. There are significant differences between methodologies (e.g. Waterfall and Agile)

Students should consult their supervisors on how to choose a methodology for their project.

Further information and reading material on project development methodologies is provided on **Blackboard**. Please check the **Learning Material** section.

### Design

The design should include both high-level and low-level design, providing the appropriate diagrams (more information is provided on Blackboard).

In the high-level design, you need to think about:

* System architecture
* User interface design (possibly)
* Object oriented design (possibly)
* Database design (possibly)
* Environment design

In the low-level design, you need to think about:

* Developing structural models
  + Classes
  + Relationships between classes
    - Inheritance
    - Uses
* Designing dynamic models
  + To show interactions among objects
    - Sequence diagrams
    - Collaboration diagrams
  + Changes of state in objects
    - Activity diagrams

The design of tests against which the developed product will at the end be tested should also be included in this chapter.

Students should always consult their supervisors on the design.

Further information and reading material on the design is provided on **Blackboard**. Please check the **Learning Material** section.

### Implementation and Testing

This is probably the most timely consuming task of the project. It is likely to take much longer than you assume. A rule of thumb: it will take three times longer than you think.

Your supervisor can provide you guidance but should not write code or solve coding issues in the implementation for you, since they are also your first marker. In case you get stuck on coding, you can get help from other tutors or visit the Expresso programming sessions. They can solve coding issues but should not write the code for you!

Ideally, a working prototype should be provided on the Project in Progress day. It is not necessary for the prototype to address all requirements.

After the implementation is finished you need to test your product using the tests you designed.

You don’t have to print hundreds of pages of code. The code should be available in a CD submitted along with your hard copies (one CD per hard copy).

Further information is provided on **Blackboard**.

### Evaluation

At the end of your project you should provide an evaluation of your project identifying the difficulties you faced and describing how you overcame them. The evaluation should cover all aspects of the project reflecting on the meetings you had with your supervisor. Directions for further work should also be provided.

Further details on the evaluation are provided on **Blackboard**.

### Formatting

* Word-processed
* A4 single-sided paper
* 1.5 inches left margin
* Font size: 11 or 12 pt.
* Double or 1½ line spacing
* Suggested font style:
  + A serif font, e.g. Times New Roman or Bookman Old Style, for the body of the report
  + A sans serif font, e.g. Arial, for titles, headings, subheadings, indexes, bibliography, etc.
* Numbered pages
* Numbered and indexed figures and tables
* UWE Harvard referencing system

### Structure

At a minimum, a project report should include the following:

* Coursework coversheet from myUWE
* Title
* Author
* Abstract
* Acknowledgements
* Table of Contents
* Table of Figures
* Table of Tables
* Introduction
* Research (Literature Review)
* Requirements
* Methodology
* Design
* Implementation
* Evaluation
* Conclusion
* References/Bibliography
* Appendices (if any)

## Project in Progress poster and viva including demonstration

Details on the **Project in Progress poster** and the **viva** are provided in Sections 5.3 and 5.5 .

# Module Schedule - Key dates

(for colour-blind people: please turn the text in the table in black as it contains text in red colour)

|  |  |
| --- | --- |
| **Week 9**  Induction week  22 September 2017  Friday 12.00-13.00 | Introduction to the module; discussion of project ideas. (2Q49) |
| **Week 10** | **Lecture**: Choosing a project topic (4Q56, 10-11pm)  Student/tutor consultation. |
| **Week 11** | **Lecture**: Choosing a project topic (4Q56, 10-11pm)  Student/tutor consultation. |
| **Week 12**  12 October 2017  Thursday 2pm | **Lecture**: Researching the project idea (ethics forms) (4Q56, 10-11pm)  Student/tutor consultation.  Deadline for supervisor allocation. (you need to choose a supervisor by that date, otherwise a supervisor will be randomly allocated) - This is done using the [online tool](https://secure.uwe.ac.uk/fet/studentprojects/assignment.asp?AssignmentID=17). |
| **Week 13**  19 October 2017  Thursday 2pm | **Lecture**: Making use of the supervisor (4Q56, 10-11pm)  Student/tutor consultation.  Submission deadline for formal project proposals. Submission is done on Blackboard. |
| **Week 14**  26 October 2017  Thursday 2pm | **Lecture:** Writing up the project (4Q56, 10-11pm)  Student/tutor consultation.  Submission deadline for ethical review checklist form. Submission is done on Blackboard. |
| **Week 15** | **Lecture:** Writing up the project (4Q56, 10-11pm)  Student/tutor consultation. |
| **Week 16 - Week 26** | Project development (ideally, by the end of this period you should have finished most parts of the project including the research, requirements analysis and some parts of the design; a prototype may also be available) |
| **Week 27**  25 January 2018  Thursday 2pm | Submission deadline for Project in Progress poster and meeting logs (all in one zip file on Blackboard) |
| **Week 28**  31 January 2018  Wednesday 2pm – 21pm | Project in progress day (posters must be printed in A1; logs should be separately printed in A4) |
| **Week 29 - Week 38** | Project development (Project drafts should be given to the supervisor for comments and feedback up to 4 weeks before the submission deadline; that is until Week 34) |
| **Week 38**  12 April 2018  Thursday 2pm | Submission deadline for Project Report  Submit **two** **hard copies** of your project reports via **submission boxes** located at your campus. A CD including your code should also be attached to each hard copy. Also submit your report on **Blackboard**. Note that you must submit everything before the deadline. |
| **Week 39-Week40** | Preparing for demonstration session |
| **Week 41 - Week 44**  Demo sessions | Demonstration sessions will be held during the assessment period; more details will be available closer to the date. |
| **Week 52** | Resit project report hand in deadline; resit demonstrations will be held within this week. More information will be provided closer to the date. |

# Material to be submitted

## Formal Project Proposal form

After selecting or being allocated a supervisor (see Section 3.4 ), students must submit a Formal Project Proposal form on **Blackboard**. The deadline for the submission is on **Week 13** (19 October, Thursday at 2pm).

The form will include: the student’s and supervisor’s details, a brief description of the topic, a short description of the aims of the project, a short description of the research done so far and the steps to follow, the pattern of meetings/ way of contact agreed with the supervisor and a short list of literature sources in UWE Harvard format. Submission details are provided in Section 6. No marks will be provided for this submission; however, it is a requirement.

You can find the template of the form on Blackboard under the Learning Material.

## Ethical Review Checklist form

An ethical review checklist form needs to be submitted on **Blackboard** after discussing with the supervisor the ethical implications of the project. The deadline for the submission is on **Week 14** (26 October, Thursday at 2pm).

The students need to answer 8 simple questions related to potential ethical implications related to their projects with a Y (for Yes) or N (for No). When Y is given as an answer further explanation needs to be provided. Submission details are provided in Section 6. No marks will be provided for this submission; however, it is a requirement.

You can find the template of the form on Blackboard under the Learning Material.

## Project in Progress Poster

A poster and meeting logs need to be submitted on Blackboard by **Week 27** (25 January 2018, Thursday 2pm) and presented on the Project in Progress day on **Week 28** (31 January 2018, Wednesday 2pm - 9pm – room details will be announced closer to the date). In principal, the poster will describe the work done so far and will outline the next steps until the completion of the project. Meeting logs will include details of the meetings with the supervisor (e.g. progress so far, what was discussed, what are the next steps).

The poster needs to clearly state the aims and objectives of the project based on critical review of relevant products and projects found in the literature. It needs to present a short description of the research (ideally research/literature review should have already been done by now), outline some of the project’s key requirements and provide a state diagram and some (if any) implementation artefacts. Finally, the poster should include clear planning and management for the rest of the project. Evidence of student engagement should be provided to the markers (logs from the meetings with the supervisor and ways that issues discussed were or will be addressed; not on the poster). All sources need to be appropriately cited and referenced on the poster. Finally, the poster needs to have good balance between visual and textual information and follow an appropriate style and structure (formally written and clearly covering the aforementioned sections).

A template of the Project in Progress poster will be provided on Blackboard in the Learning Material section. Students need to print their posters in **A1** size for the Project in Progress day. Meeting logs must be printed separately in A4 size. The assessment weightings are provided in the APPENDIX A. The marking criteria are provided in the APPENDIX B. Submission details are provided in Section 6.

The students must **submit** their posters and meeting logs on Blackboard by **week 27** (25 January 2018, Thursday 2pm)

The students will have to **present** their posters and meeting logs on **week 28** (13 January 2018, Wednesday 2pm – 9pm)

## Project Report

The project report needs to be submitted by **week 38** (12 April 2018, Thursday 2pm). **Two hard copies** need to be submitted via submission boxes located at your campus. A **CD** with your code needs to be provided within each hard copy of your project. You also need to submit your project report in **digital** form on Blackboard (same deadline).

Please bear in mind that there will be large queues for the printers on the date of the deadline, therefore it’s wise to print and hand in your report in advance (e.g. a couple of days before the deadline).

The report needs to describe the whole project development process in a professional manner following a specific format and structure as indicated in Section 3.7 . At the end of your project you should have a working product that addresses a specific problem based on the research you have done, following the methodology you have chosen and the design you have come up with. At the end, you need to test your product, evaluate your project and provide directions for further improvement. Further details about the report (structure, format, content details etc.) are provided in Section 3.7 . Please read this Section carefully following all links on Blackboard.

A template will not be provided for this report; however, it needs to follow the aforementioned format and structure. The assessment weightings are provided in the APPENDIX A. The marking criteria are provided in the APPENDIX B. Submission details are provided in Section 6.

## Viva including a demo

Within the assessment period (**week 41 - week 44**) viva sessions will be held were students will present their product to their supervisor (first marker) and their second marker. To pass your viva, you need to present a working software and provide evidence that you understand how your software is working (both in low-level and high-level). You are expected to provide a short demo of your product, explain its capabilities and how it addresses the problem, describe the low-level and high-level design and answer your markers’ questions.

Please be reminded that during the demo session your markers will assess both your technical and your presentation skills, therefore a good and confident presentation can also give you some marks. You should not rely on your supervisor providing the answers to questions you may be asked; your supervisor is there as your first marker.

Further details on the format and dates of the demo sessions will be provided closer to the date. The assessment weightings are provided in the APPENDIX A. The marking criteria are provided in the APPENDIX B. Submission details are provided in Section 6.

# Submissions details

Please note that the submission deadlines are absolute and based on UWE server time, therefore you are strongly advised to submit work well ahead of the deadline dates to avoid situations where penalties could be incurred. Penalties are imposed if a submission is made up to 24 hours after the deadline, and the highest mark you can receive will be the minimum pass mark (if the assessment is passed). After the 24 hours have passed, the work will not be accepted for marking.

If you are submitting your coursework in the submission boxes please ensure that the work is secure and placed in a plastic wallet, unless you have been advised to submit it in another style. Don’t forget to print your coursework coversheet from myUWE which should also be attached to your work.

**First Sit**

|  |  |  |
| --- | --- | --- |
| FORMAL PROJECT PROPOSAL form (0%)  Requirement | Submit **Formal Project Proposal form** on Blackboard. | Deadline:  Week 13 (19 October 2017, Thursday 2pm) |
| ETHICAL REVIEW CHECHLIST form (0%)  Requirement | Submit **Ethical Review Checklist form** on Blackboard. | Deadline:  Week 14 (26 October 2017, Thursday 2pm) |
| POSTER (5%) | **Project -In-Progress Poster** presentation (of poster and meeting logs) on Project-in-Progress day **and** submission on Blackboard | Deadline:   * Submission of **poster and logs** on Blackboard on **week 27** (25 January 2018, Thursday 2pm) * Presentation on Project in Progress day (poster and logs) on **week 28** (31 January 2018, Wednesday 2pm-9pm) |
| PROJECT REPORT (70%) | **Project Report** (8000 -10000 Words)  Submit **two** **hard copies** of your project reports via **submission boxes** located at your campus. A CD including your code should also be attached to each hard copy. Also submit your report on **Blackboard**. Note that you must submit everything before the deadline. | Deadline:  Week 38 (12 April 2018, Thursday 2pm) |
| VIVA (25%) | Viva including Demonstration held during Resit Exam Period | Deadline:  Demonstration sessions will be held during the assessment period (week 41-44); more details will be available closer to the date. |

**Resit**

|  |  |  |
| --- | --- | --- |
| FORMAL PROJECT PROPOSAL form (0%)  Requirement | Submit **Formal Project Proposal form** on Blackboard. | Deadline:  Week 52; more details will be available closer to the date. |
| ETHICAL REVIEW CHECHLIST form (0%)  Requirement | Submit **Ethical Review Checklist form** on Blackboard. | Deadline:  Week 52; more details will be available closer to the date. |
| PROJECT REPORT (70%) | **Project Report** (8000 -10000 Words)  Submit **two** **hard copies** of your project reports via **submission boxes** located at your campus. A CD including your code should also be attached to each hard copy. Also submit your report on **Blackboard**. Note that you must submit everything before the deadline. | Deadline:  Week 52; more details will be available closer to the date. |
| VIVA (30%) | Viva including Demonstration held during Resit Exam Period | Deadline:  Week 52; more details will be available closer to the date. |

The assessment elements are described in more detail in Section 5. The assessment weightings are provided in the APPENDIX A. The marking criteria are provided in the APPENDIX B. The module schedule with all key dates is provided in Section 4.

You will receive informal feedback verbally through all teaching sessions – ensure you listen carefully. Each assessment you submit will be returned to you with written feedback, and consists of comments made by tutors on students’ assessed work which enables students to understand how they have met the defined assessment criteria and identifying areas for further improvement. The period for providing feedback will not normally exceed 20 working days (excluding University closure days) following the deadline for submission of the assessment concerned. This period may be shorter or longer for some forms of assessment. Where the period is greater than 20 working days, students will be informed of the deadline and the rationale for the extension. Outcomes which have not been confirmed by an examining board shall be considered as unconfirmed.

# Additional information and reading lists

Your module reading list can be accessed online, either directly through the link below or through the module’s Blackboard page.

The short video available on the library’s website will introduce you to some of the key features of the online reading list system: <http://www1.uwe.ac.uk/library/searchforthingsa-z/databases/a-z/r.aspx#readinglists>

You can find the reading list here:

<https://uwe.rl.talis.com/lists/EDDE6A15-8971-6CB6-62EB-87EDDE34B3D9.html>

If the link is not working please check on Blackboard.

To access an example of a previous exam paper follow this link:

<http://www1.uwe.ac.uk/library/usingthelibrary/searchforthingsa-z/exampapers.aspx>

A guide to referencing can be found at: <http://www1.uwe.ac.uk/students/studysupport/studyskills/referencing.aspx>

The University’s policy on word count can be found:

<http://www1.uwe.ac.uk/aboutus/policies.aspx>

# Communication

Throughout your time with us, you will receive regular communication from your module leaders, and also administrative staff. It is your responsibility to ensure that you read everything that you are sent, and act upon it where appropriate.

The main communication channel used is the Blackboard for all the modules you are currently studying. Blackboard provides the main communication channel for module specific information and these too should be checked regularly for new content and announcements.

You are also responsible to contact the supervisor that is assigned to your project.

Please see <http://info.uwe.ac.uk/myUWE/guidance/default.asp> for further information on all aspects of your myUWE portal.

# Advice and support

There are a range of facilities and services available to go to for advice and support depending on what the issue is. Remember - asking for help at the earliest possible stage will help you in the long run. Your first point of call should always be your Academic Personal tutor, as they will be able to sign post you to the right services and will be able to deal with specific matters relating to teaching and learning. If you are not able to contact your Academic Personal tutor for any reason go to an Information Point, details of which can be found at <http://www1.uwe.ac.uk/students/informationpoints.aspx>

Student Support Advisers are available and can also be contacted through the Information Points, see <http://www1.uwe.ac.uk/students/academicadvice/studentadvisers.aspx> for information on how they might be able to help.

However, you are more than welcome to talk to other members of UWE staff depending on who you feel most comfortable talking to.

# References

Cornford, T. and Smithson, S. (2006). *Project Research in Information Systems: A Student's Guide*. 2nd ed. Basingstoke: Palgrave Macmillan.

Dawson, C.W. 2015, Projects in computing and information systems: a student's guide, 3rd ed. Pearson Education, Harlow.

Turabian, K. L., Booth, W. C., Colomb, G. G. & Williams, J. M. (2007)\*. *A Manual for Writers of Research Papers, theses, and dissertations: Chicago style for students and researchers, Theses, and Dissertations,* 7th ed. Chicago: University of Chicago Press.

\*This edition of Turabian has been significantly revised, is relatively cheap, and contains useful sections on referencing and on writing style.

# APPENDIX A

**Assessment weightings**

ELEMENT 1: **Project Report (8000 - 1000 words) (70% of total marks)**

|  |  |
| --- | --- |
| Research | (20%) |
| Requirements Analysis and Product Design | (20%) |
| Software development/ Implementation | (40%) |
| Project Evaluation | (10%) |
| Report Professionalism | (10%) |
|  | Total: 100% |

ELEMENT 2: **Viva including demonstration (25% of total marks)**

|  |  |
| --- | --- |
| Technical skills (demo contents) | (80%) |
| Presentation skills | (20%) |
|  | Total: 100% |

ELEMENT 3: **Project in Progress Poster (5% of total marks)**

|  |  |
| --- | --- |
| Aims and scope | (25%) |
| Progress, Planning and Management | (25%) |
| Engagement | (25%) |
| Poster Quality | (25%) |
| Total: 100% |

# APPENDIX B

**Marking criteria**

Component A element 1: **Project report**:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Percentage mark | 100-89 | 85-70 | 69-60 | 59-50 | 49-40 | 39-30 | 29-0 |
| Overall Descriptor | Outstanding | Excellent | Very good | Good | Adequate | Poor/Inadequate | Very poor |
| Assessment Criteria |  |  |  |  |  |  |  |
| **Research** | **Outstanding** **analysis** of relevant works; provides **critical** **review** of relevant applications **and** research projects; demonstrates **outstanding insight** into the problem. **Excellent** use of sources (both in quantity - above 10 - and quality). All sources are **appropriately** **cited and referenced**. It leads to the requirements analysis sections; excellent flow. | **Excellent** analysis of relevant works; provides **critical** review of relevant applications **and** research projects; demonstrates **outstanding insight** into the problem. **Excellent** use of sources (both in quantity - above 10 - and quality). All sources are **appropriately** **cited and referenced**. Some links with the requirements analysis. | **Good** analysis of relevant works; provides **critical** **review** of relevant applications **and/or** research projects; demonstrates **excellent insigh**t into the problem. **Good** use of sources (both in quantity - above 10 - and quality). All sources are **appropriately** **cited and referenced**. | **Good** analysis of relevant works; provides a **good** **review** of relevant applications **and/or** research projects, however it **could be more critical**;demonstrates **good insigh**t into the problem. **Good** use of sources. **Most** sources are **appropriately** **cited and referenced**. | **Adequate** analysis of relevant works; provides **some** review of relevant applications **and/or** research projects however it **lacks depth**; demonstrates **some insigh**t into the problem. **Good** use of sources. Sources need to be **appropriately** **cited and referenced**. | **Poor** analysis of relevant works. Demonstrates **little or no insight** into the problem. | Little or no analysis of relevant works is provided. |
| **Requirements Analysis and Product Design** | **Outstanding** description, analysis and presentation of the requirements; requirements are linked to the research.  **Provides and discusses in great detail** all design steps and appropriate diagrams (those applicable): class diagram, flow diagram, sequence diagram, state diagram, use case diagram, database design, test design.  **Outstanding**  presentation and discussion of the diagrams. | **Excellent** description, analysis and presentation of the requirements; some links with the research are evident.  **Provides and discusses in detail** all design steps and appropriate diagrams (those applicable): class diagram, flow diagram, sequence diagram, state diagram, use case diagram, database design, test design.  **Excellent** presentation and discussion of the diagrams. | **Very good** description, analysis and presentation of the requirements.  **Provides and discusses clearly** all design steps and appropriate diagrams (those applicable): class diagram, flow diagram, sequence diagram, state diagram, use case diagram, database design, test design.  **Very good** presentation and discussion of the diagrams. | **Good** description, analysis and presentation of the requirements.  **Provides and discusses** the design steps and **most of the** appropriate diagrams (those applicable): class diagram, flow diagram, sequence diagram, state diagram, use case diagram, database design, test design.  **Good** presentation and discussion of the diagrams. | **Adequate** description, analysis and presentation of the requirements.  Design steps are **not clearly defined**; provides **some of the** appropriate diagrams (those applicable): class diagram, flow diagram, sequence diagram, state diagram, use case diagram, database design, test design. | **Poor** description, analysis and presentation of the requirements. Design steps are **not clearly presented**; most diagrams are **missing**. | **Little or no** description, analysis and presentation of the requirements. Design steps are **not clearly presented;** mostdiagrams are **missing**. |
| **Software Development/ Implementation** | Aims and objectives of the project have been **fully** met; **impressive** demonstration of programming skills. Demonstrates **outstanding insight** into the technologies employed.  Appropriate software testing; tests all aspects of the product in **great detail**; **excellent reflection** on the tests’ results. | Aims and objectives of the project have been **fully** met; **excellent** demonstration of programming skills. Demonstrates **excellent insight** into the technologies employed.  Appropriate software testing; tests all aspects of the product in **great detail**; **excellent reflection** on the tests’ results. | Aims and objectives of the project have been met to **a great extent**; **very** **good** demonstration of programming skills. Demonstrates **very good insight** into the technologies employed.  Appropriate software testing; tests all aspects of the product in **great detail**; **very good reflection** on the tests’ results. | Aims and objectives of the project have been met to **some extent**; **good** demonstration of programming skills. Demonstrates **good insight** into the technologies employed.  Appropriate software testing; tests **most** aspects of the product in **detail**; **good reflection** on the tests’ results. | Aims and objectives of the project have been **partially** met; **some** demonstration of programming skills. Demonstrates **some insight** into the technologies employed.  **Some or Poor** software testing; tests **some** aspects of the product; **good reflection** on the tests’ results. | **Little evidence** that the aims and objectives of the project have been met; **little or no** demonstration of programming skills. Demonstrates **some insight** into the technologies employed.  Poor software testing; tests **some** aspects of the product; **limited reflection** on the tests’ results. | Provides **little or no** evidence that the aims and objectives of the project have been met; **little or no** demonstration of programming skills. Demonstrates **little or no insight** into the technologies employed.  **Little or no** software testing; **limited or no reflection** on the tests’ results. |
| **Project Evaluation** | **Outstanding evaluation** of the project; demonstrates outstanding reflection on all aspects of the project (research, requirements, methodology, design etc.), discusses in great detail limitations and provides realistic suggestions for further work.  **Outstanding** use of the feedback provided in the PiP and during meetings with the supervisor. | **Excellent evaluation** of the project; demonstrates excellent reflection on all aspects of the project (research, requirements, methodology, design etc.), discusses in detail limitations and provides realistic suggestions for further work.  **Outstanding** use of the feedback provided in the PiP and during meetings with the supervisor. | **Very good evaluation** of the project; demonstrates reflection on most aspects of the project (research, requirements, methodology, design etc.), discusses limitations and provides realistic suggestions for further work.  **Good** use of the feedback provided in the PiP and during meetings with the supervisor. | **Good evaluation** of the project; demonstrates reflection on some aspects of the project (research, requirements, methodology, design etc.), discusses limitations and provides realistic suggestions for further work; more depth is needed in the analysis.  **Good** use of the feedback provided in the PiP and during meetings with the supervisor. | **Poor evaluation** of the project; demonstrates **little reflection** on the aspects of the project (research, requirements, methodology, design etc.); little discussion of the limitations; provides suggestions for further work; more depth is needed.  **Little** use of the feedback provided in the PiP **and/or** during meetings with the supervisor. | **Limited evaluation** of the project; demonstrates **little or no reflection** on the aspects of the project (research, requirements, methodology, design etc.); little or no discussion of the limitations; provides little or no suggestions for further work; more depth is needed.  **Little or no** use of the feedback provided in the PiP **and/or** during meetings with the supervisor. | **Little or no evaluation** of the project; demonstrates **little or no reflection** on the aspects of the project (research, requirements, methodology, design etc.); little or no discussion of the limitations; provides little or no suggestions for further work;  **Little or no** use of the feedback provided in the PiP **and/or** during meetings with the supervisor. |
| **Report Quality/ Professionalism** | Uses appropriate terminology **accurately**. **Professionally** presented in both layout on the page and logical structure. **Impressively** presented in an appropriate style. Grammatically of an **extremely** **high** standard. Results and products of the project **are** of publishable quality and/or of a standard **comparable to** **or better than** that found in the products of industry leaders. | Uses appropriate terminology **accurately**. **Professionally** presented in both layout on the page and logical structure. **Very** **well** presented in an appropriate style. Grammatically of a **very** **high** standard. Results and products of the project are **likely to be** of publishable quality and/or of a standard **comparable to** that found in the products of industry leaders. | A **good grasp** of the appropriate terminology. **Well** presented in both layout on the page and logical structure. Presented in an appropriate style. **Good** grammatical standard. Results and products of the project **would require some rewriting and improvement** to be of publishable research quality and are likely to be of a standard **slightly below** that found in the products of industry leaders. | **Mostly uses** appropriate terminology. **Well** presented in both layout on the page and logical structure. Presented in **reasonable** way which allows it to be easily read. **Lacking** in clarity and grammatical structure.  Results and products of the project **would require significant rewriting and improvement** to be of publishable research quality and are likely to be of a standard **significantly below** that found in the products of industry leaders. | **Often fails** to use appropriate terminology. **May lack** in layout and/or logical structure.  **May** show a **lack** of clarity and comprehensibility.  **Lacking** grammatical structure.  Results and products of the project are likely to be **poor** **and/or** **incomplete** and **well** **below** publishable quality and of a standard **significantly** **below** that found in the products of industry leaders. | **Lack of or**  **inaccurate** use of  the appropriate  terminology.  Typically **fails** to  accurately or completely describe the work done and will often contain **little indication** of which parts of the problem are understood and which are not. **Often** shows a **lack** of structure,  comprehensibility, clarity and grammatical quality. Results and products of the project are **poor** and/or incomplete, **well below**  publishable quality and of a standard very significantly below that found in the products of industry leaders. | **No use** of theappropriate terminology. **Fails** to describe the problem and the work done. Shows a **lack** of structure,  comprehensibility, clarity and grammatical quality. Results and  products of the  project are  **insignificant**,  **poor** and/or  **incomplete**. |

Component A element 2: **Viva including demonstration**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Percentage mark | 100-89 | 85-70 | 69-60 | 59-50 | 49-40 | 39-30 | 29-0 |
| Overall Descriptor | Outstanding | Excellent | Very good | Good | Adequate | Poor/Inadequate | Very poor |
| Assessment Criteria |  |  |  |  |  |  |  |
| **Technical aspects** | Provides a **fully working** software. Demonstrates **outstanding insight** into the technologies employed. | Provides a **fully working** software. Demonstrates **excellent insight** into the technologies employed. | Provides a **fully working** software. Demonstrates **very good insight** into the technologies employed. | Provides a **working** software. Demonstrates **good insight** into the technologies employed. | Provides a **partially working** software. Demonstrates **some insight** into the technologies employed. | Provides **little** evidence of a working software. Demonstrates **limited insight** into the technologies employed. | Provides **little or no** evidence of a working software. Demonstrates **little or no insight** into the technologies employed. |
| **Presentation skills** | **Outstanding** presentation performance. Answers **all** questions in **great detai**l. Confident. **Excellent** reflection. | **Excellent** presentation performance. Answers **most** questions in **great detail**. Confident. **Excellent** reflection. | **Very good** presentation performance. Answers **most** questions in detail. **Lacks** confidence. **Very good** reflection. | **Good** presentation performance. Answers **most** questions **to some extent**. **Lacks** confidence. **Good** reflection. | **Adequate** presentation performance. Answersthe questions **to some extent**. **Lacks** confidence. **Adequate** reflection. | **Poor** presentation performance. **Most** questions are **not properly answered**. **Lacks** confidence. **Little or no** reflection. | **Very poor** presentation performance. Questions are **not properly answered**. **Lacks** confidence. **Little or no** reflection. |

Component A element 3: **Project-in-progress** **poster**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Percentage mark | 100-89 | 85-70 | 69-60 | 59-50 | 49-40 | 39-30 | 29-0 |
| Overall Descriptor | Outstanding | Excellent | Very good | Good | Adequate | Poor/Inadequate | Very poor |
| Assessment Criteria |  |  |  |  |  |  |  |
| **Aims and Scope** | Aims and objectives **clearly stated** and **linked** to the research outcomes; scope **clear and appropriate**. | Aims and objectives **clearly stated** and **linked** to the research outcomes **to some extent**; scope **clear and appropriate**. | Aims and objectives **clearly stated** but **not clearly linked** to the research; scope **clear and appropriate**. | Aims and objectives **stated**; **some consideration** of scope. | Aims and objectives **stated** **to some extent**; scope **not very clear**. | Aims **poorly** specified; scope **unclear**. | Aims **barely** specified; scope **unclear**. |
| **Progress, Planning and Management** | **Outstanding** presentation of the research done with an **evident** critical review. Provides **clear and appropriate** key requirements (5 functional and 5 non-functional). A **clear and appropriate** state diagram is provided. Implementation artefacts showcase an **outstanding** progress. **Clear and appropriate** planning and management presented on the poster. | **Excellent** presentation of the research done with **some** critical review. Provides **clear and appropriate** key requirements (5 functional and 5 non-functional). A **clear and appropriate** state diagram is provided. **Some** implementation artefacts are provided. **Clear and appropriate** planning and management presented on the poster. | **Very good** presentation of the research done with **some** critical review. Provides **clear** key requirements (5 functional and 5 non-functional). A **clear** state diagram is provided with **minor** issues. **Limited** **or no** implementation artefacts. **Clear and appropriate** planning and management presented on the poster. | **Good** presentation of the research done but with **little or no** critical review. Provides **clear** key requirements (5 functional and 5 non-functional). A state diagram is provided but needs **further work**. **Limited** **or no** implementation artefacts. **Good** planning and management presented on the poster. | Demonstrates an **adequate** research with **limited or no** critical review. The requirements are **not appropriate**. **Limited** design. **Poor** planning and management. **Danger** of falling behind schedule. | **Little** evidence of progress so far. **Very limited or poor** research. The requirements are **not appropriate**. **Poor or no** design. **Limited or no** planning and management. The project is **behind schedule**. | **Little or no** evidence of progress so far. **Little or no** research.  The requirements are **not appropriate or missing**. **Poor or no** design. **Poor or no** planning and management. The project is **very** **behind schedule** |
| **Engagement (not on poster)** | Clear evidence of engagement (**regular** meetings with the supervisor); detailed logs/notes from the meetings are provided along with ways that issues discussed were or will be addressed. | Clear evidence of engagement (**regular** meetings with the supervisor); detailed logs/notes from the meetings are provided. | Clear evidence of engagement (**regular** meetings with the supervisor); logs/notes from meetings with the supervisor are provided; some **missing logs**. | **Some** engagement (some meetings with the supervisor); notes/logs are **not clear**. | **Poor** engagement (few meetings with the supervisor); **little or no** notes or logs from the meetings. | **Little or no** engagement (only a couple of meetings with the supervisor); **little or** **no notes or logs**. | **Little or no** engagement. May have **not contacted** the supervisor yet. |
| **Poster Quality** | **Excellent** use of sources. **All** sources correctly cited and referenced with full details listed. **Appropriate** style and structure. **Good balance** between visual and textual information. | **Excellent** use of sources. **All** sources correctly cited and referenced with full details listed. **Appropriate** style and structure. Needs to **improve** balance between visual and textual information. | **Appropriate** sources with **minor issues** in the quality. Sources **largely** cited and listed correctly. **Minor issues** in style and/or structure. | Could **improve** the use of sources. **Most** sources cited and listed. **Minor issues** in style and/or structure. | Could **improve** the use of sources. **Some** citation of sources but some source details are **missing**. Style and/or structure **needs improvement**. | **Limited** sources or sources of **poor quality**. Some citation of sources but some source details are **missing**. Style and/or structure **needs improvement**. | **No** sources provided. Style and formatting **not appropriate**. |