Assess MSc Dissertation (individual)

To be completed by Wei Pan.

Candidate: Zain Al-qaimi (10461586)

Project title: Research and develop a Renewable Power Generation Data Modelling Application

Programme: MSc Adv Computer Science

Instructions

Dissertations are expected to be between 12,000 and 18,000 words long. Submissions significantly outside these guidelines will be penalised. References, appendices and figure/table captions are not included in the word count.

Step 1 of 6 - mandatory

Abstract and introduction

The abstract is expected to provide a summary of the project including key results and/or achievements. The introduction should set-the-scene and introduce the subject area of the work. This section should include a description and motivation of the research question(s) or project specification. Aims and objectives should be given. The structure of the dissertation is normally described.

Prompt: How well has the student displayed an understanding of the project, research question and research aims and objectives. Does the abstract give an appropriate executive summary of the work.

Unacceptable: 0 - 39%
Work of poor quality. The dissertation fails to demonstrate that the main points of the project have been understood. There are major difficulties with at least one of the two sections (abstract or introduction). Poor references and most probably significant problems with the written quality.

Problematic: 40 - 49%
Work of quality below the level expected for a MSc dissertation - typically this is at diploma level. It is not clear if the essential points of the project have really been understood. The abstract may not provide an adequate "executive summary" of the work. References are less than typically expected in the introductory section with an overuse of inappropriate web sources. The written quality is likely to be marginal and could lack a good logical flow.

Satisfactory: 50 - 54%
Work of acceptable quality but possibly requiring a benevolent reader to fully understand the points made, possibly lacking detail, explanations, and/or containing minor inaccuracies. It is likely that there will be some lack of clarity with either the abstract or the introduction. The main technical points might be understood but this is not completely clear. There will be some references but possibly overuse of Wikipedia etc. Acronyms will not necessarily be defined.

Better: 55 - 59%
Work of reasonable quality demonstrating the key points described in the abstract and introduction are understood. Essentially readable but possibly lacking detail, explanations, and/or containing minor inaccuracies. References are likely to be mixed with some marginal web-based sources and some archival sources. Acronyms will be mostly defined.

Good: 60 - 69%
Easily understood, good solid work with sound technical content and good use of references. The abstract and introduction are appropriate. The written quality is mostly good to very good, but possibly some minor language, style or English usage issues. Acronyms will be mostly defined.

Very Good: 70 - 79%
Very good quality, precision and coverage. The abstract and introduction are all clearly presented with good quality references where appropriate. There is a clear understanding of the technical material. It is well written with very few mistakes in written English, technical terms and acronyms are always defined.

Excellent: 80 -100%
Excellent quality, precision and coverage. The quality is that expected in a scientiíc paper. Convincing abstract and introduction. It is clear that the student has mastered the material. There is proper use of high quality references and with nearly no mistakes in written English, technical terms and acronyms are always deíned.

Evaluate between 0 and 100. Raw mark wilbe weighted by 0.15.

Wei Pan' s evaluation

Step 2 of 6 - mandatory

Background and Theory

This includes the description and should provide an understanding of topic/problems, and an awareness of the solutions to the technical/scientiíc challenges. Suitable background material and appropriate good quality references, putting the work of the project in context is expected. Does the background and any theory/ design show a level of understanding appropriate for a Masters degree.

Prompt: Has the student undertaken a satisfactory amount of background reading and research. Are good quality references provided. Does the student demonstrate a level of understanding of the subject area and theory at the level expected for a Masters degree.

In the following, when we say "artefact", we mean the programme, system, experiment, case study, report, framework, formalism or mathematical development that the student set out to design and produce in the project.

Unacceptable: 0 - 39%
There will be some attempt to write a background and/or theory section. The work will be superícial, perhaps including little more than some basic deínitions. The logical îow of the section(s) may not be appropriate and references will be sparse and likely of poor quality (non-archival). The written quality will probably be quite poor with errors on most pages. At the bottom of this band (< 25%), any work presented will be at a superícial level. It will be clear that the student is well below the level required for a masters degree, probably similar to an average to poor írst year undergraduate. References will be inadequate in scope and/or sources used.

Problematic: 40 - 49%
Work of quality below the level expected for a MSc dissertation - typically this is at diploma level. Not all the background/theory required for the project will be present or if it is present it will be at a level that is too superícial. References are less than typically expected with a likely overuse of inappropriate web sources. The written quality is likely to be marginal and lack a good logical îow.

Satisfactory: 50 - 54%
Work of acceptable quality but may require the reader to íll in the occasional gap in logical îow. Potentially lacking detail, explanations, and/or containing minor inaccuracies. The main technical points appear to be understood but this is not completely clear. The points covered are mostly appropriate to the work of the project. There will be some references but possibly overuse of Wikipedia etc. Acronyms will not necessarily be deíned.

Better: 55 - 59%
At this level, the student will have produced a background/theory section of reasonable quality. It is expected that signiícant amounts of the background material relevant to the project will be present but may not be of particularly impressive quality. The work is essentially readable but possibly lacking detail, explanations, and/or containing minor inaccuracies. References are likely to be mixed with some marginal web-based sources and some archival sources. Acronyms will be mostly deíned.

Good: 60 - 69%
The background/theory sections are easily understood and it is clear that the student has produced good solid work with sound technical content and good use of decent quality references. The section(s) will cover most of the background/theory relevant to the project. The written quality is mostly good to very good, but possibly some minor language, style or English usage issues. Acronyms will be mostly deíned.

Very Good: 70 - 79%
The student has produced a clear background and/or theory section with a very good logical îow. All important aspects of the background/theory relevant to the work of the project are present.

The use of references is very good with high quality archival sources. It is well written with very few mistakes in written English, technical terms and acronyms are always deíned.

Excellent: 80 -100%
The student has produced an impressive background and/or theory section which demonstrates an impressive command of the literature at the level expected for a írst year PhD transfer report. The student has demonstrated a full awareness of the research context and relates well his/her artefact to currently available artefacts in this area. The section will contain references at a level expected in the background/theory section of a publication.

Evaluate between 0 and 100. Raw mark wilbe weighted by0.25.

| | Wei Pan' s evaluation |

Step 3 of 6 - mandatory

Technical quality, methodology and evaluation

This assesses the main technical output from the project. The correctness and usability etc. of the ínal product/report should be described. This section covers steps taken to evaluate, test or compare the work. Does it include any original elements of work? How complex and work intensive was the project?

Prompt: Does the student demonstrate a level of understanding of the theory, design and technical aspects of the project at the level expected for a Masters degree Is the technical quality of the work actually done at a level appropriate for a Masters degree. Has the student demonstrated a suitable level of critical analysis and evaluation.

Unacceptable: 0 - 39%
There will be evidence of some work on the design and/or the development of the artefact. It will not have progressed very far, and there will be very little in a ínal state. Perhaps just some components in a state where they can be tested independently. At the bottom of this level (< 25%), there is very little design and work towards the product, and almost nothing works. If the student has had to learn anything, there is no evidence that he/she has managed to use it to do anything related to the project.

Problematic: 40 - 49%
The design of an artefact may have been completed (after a fashion) but this artefact will not be very large or very complicated. The development of the artefact will likely not be complete unless it is particularly simple. Overall a student at this level will have achieved less than expected at masters level for 6 months of eìort.

Satisfactory: 50 - 54%
A student at this level will have completed the design and development of a relatively straightforward artefact and demonstrated some minimal functionality. This product is not large, and its development did not involve major original ideas from the student. Its testing or evaluation is rather trivial.

Better: 55 - 59%
At this level the student will have completed the design and most of the development of a modestly complex artefact that did not involve substantial creativity from the student. Also, the testing is not very convincing. It may not be suïciently complete to use as intended, but demonstrates a range of functionality. The design might show some îaws, or there may be evidence of bugs which would render it less than fully useable.

Good: 60 - 69%
This project has produced something solid and convincing which works/make sense and shows a clear level of competence and some level of creativity. The artefact may not be impressive and there may be ways in which it could be improved. The size and complexity of the task was substantial, but well within the usual capabilities of a 6 month project. There may be some questionable design decisions, and testing, where appropriate, may have some small weaknesses.

Very Good: 70 - 79%
The student has designed and developed a substantial, well-rounded artefact, of good quality in all aspects. All the parts work/make sense and overall it shows a good degree of creativity and technical ability.

Testing or evalution, where appropriate, is good.

Excellent: 80 -100%
The student has designed and developed an impressive, substantial artefact which could be the core of a publication. Considerable creativity, independence, and originality went into this project: the result is impressive. The student has demonstrated a full awareness of the research context and relates well his/her artefact to currently available artefacts in this area. Testing, where appropriate, is comprehensive.

Evaluate between 0 and 100. Raw mark wilbe weighted by 0.35.

Wei Pan' s evaluation

Step 4 of 6 - mandatory

Summary and conclusions

This section includes the conclusions and a summary of achievements, reî ection, identiî cation of improvements and/or further

work. Prompt: Are conclusions presented based on the work done in the project. Are there any suggestions for future directions.

Unacceptable: 0 - 39%
Little attempt has been made to summarise the work and/or draw conclusions. Any future work suggested will be superí cial. It is likely that the conclusions will not match the description of the project given in the abstract.

Problematic: 40 - 49%
Any summary and/or conclusions will be below the level expected for a MSc dissertation. The section is likely to be brief and not provide the reader with a clear idea as to what has been done or achieved. Any suggestions for future work will be limited in scope.

Satisfactory: 50 - 54%
A summary and/or conclusions will be present. The student will have made some eì ort to draw the work of the project together but it is likely that this will appear rather superí cial. The main technical points might be understood but this is not completely clear. Similarly, potential future work will be mentioned but this will not necessarily be very convincing.

Better: 55 - 59%
Work of reasonable quality demonstrating the key points described in the abstract are reî ected in the conclusions. The overall contribution(s) of the project are understood. It will be essentially readable but possibly lacking detail, explanations, and/or containing minor inaccuracies.

Good: 60 - 69%
A good solid summary, conclusions and future work is provided. It is clear that the student has understood the project and is able to point to future directions the work might take. The written quality is mostly appropriate, but possibly some minor language, style or English usage issues.

Very Good: 70 - 79%
The summary, conclusions and suggestions for future work are very good quality and clearly presented. There is a clear understanding of the achievements of the project and a path to future work. It is well written with very few mistakes in written English and overall it would rank with the best of the í nal year undergraduate projects.

Excellent: 80 -100%
The summary, conclusions and suggestions for future work are excellent in precision and coverage. The quality is that expected in a scientií c paper or good í rst year PhD transfer report. It is clear that the student has mastered the material and has either a deí nitive set of conclusions or a well thought through plan for future work to reach deí nitive conclusions. There will be nearly no mistakes in written English.

Evaluate between 0 and 100. Raw mark wilbe weighted by 0.1.

	Wei Pan's evaluation

Step 5 of 6 - mandatory

Presentation, structure and language

Organisation and structure of the dissertation. Is the dissertation laid out in a logical style with appropriate sections and sub-sections. Are the references complete and properly formatted. Are ígures, tables and equations properly numbered and appropriate for the work. Does the dissertation demonstrate a proper use of the English language, quality of the prose, clarity of explanations, spelling, punctuation, and legibility. Is the dissertation professionally presented?

Prompt: Is the dissertation professionally presented. Does it have the correct structure and demonstrate proper use of the English language. Are the references complete and correctly formatted.

Unacceptable: 0 - 39%
The length guidelines (see introduction) have been ignored. The structure and presentation of the dissertation is déí cient with major incoherencies or gaps. The overall written quality is quite poor with numerous mistakes on most pages. The references are badly formatted and/ or inadequate.

Problematic: 40 - 49%
The structure and presentation of the dissertation is insuï cient at MSc level with incoherencies or gaps. The overall written quality show déí ciencies on a larger scale that the occasional typo or badly worded sentence. The length of the work could be outside the guidelines (see introduction). The references are likely to be poorly formatted.

Satisfactory: 50 - 54%
The dissertation is of a minimal acceptable quality with a functional structure and presentation, all the expected elements are present. Any deviation from the length guidelines (see introduction) is minor. The written quality is basically sound but not necessarily clear without some interpretation. There may be some déí ciencies with the references and their formatting.

Better: 55 - 59%
The dissertation is of acceptable quality with a structure and presentation that makes sense. Any deviation from the length guidelines (see introduction) will be minor and not aì ect the overall assessment of the dissertation's quality. The written quality is acceptable but may need some minor intrepretation by the reader. There should be only a few déí ciencies with the references and their formatting.

Good: 60 - 69%
The structure and presentation of the dissertation is of good quality and any deviation from the length guidelines (see introduction) is very minor. The chapters (sections) are appropriate for the work. The references are mostly correctly formatted and appropriate. The written quality is below í rst class with some minor errors and/ or inconsistencies but overall is entirely readable without the reader having to guess what was intended.

Very Good: 70 - 79%
The structure and presentation of the dissertation is of very good quality and conforms to the length guidelines (see introduction) (required). The written quality is í rst class with at most a few minor errors. The î ow of the dissertation is excellent with a good and appropriate structure. References are almost always correctly formatted and complete, and overall of good quality and appropriate in number. The dissertation could be used as an example for future students.

Excellent: 80 -100%
The dissertation is exemplary with an entirely appropriate structure and presentation and conforms to the length guidelines (see introduction) (required). The work demonstrates an excellent use of the English language. References are correctly formatted and complete, and overall of high quality and appropriate in number. Dissertations falling in to this category represent the very top of expectations. The dissertation should be used as an example for future students.

Evaluate between 0 and 100. Raw mark wilbe weighted by 0.15.

	Wei Pan' s evaluation

Step 6 of 6 - mandatory

Feedback

Informative feedback should be provided on the dissertation. Normally this is expected to be at least a paragraph of text. There is a minimum of 500 characters.

Wei Pan's answer to be provided here. This answer will be visible to the candidate.

Running weighted total = 0

Save temporarily   Submit final mark (cannot be undone)