

APPENDIX GA36a

LEVEL 4 ASSESSMENT SPECIFICATION

Student name:		Student ID number:	
Programme:	Advanced Manufacturing Operations		
Module:	Study Skills		
Module code:	M4X02063/M4X00384	Contribution to Overall Module Assessment (%):	40%
Lecturer:	Rachel Alexander	Internal Verifier:	Arnaud Marotin
Assignment Title:	Assessment 1	Word count (or equivalent):	2000 words max
Submission deadline:	15 th November 2019	Return date of provisional marks & written feedback:	13th December 2019
Submission method:	All written assessments, where practical and possible, must be submitted via Turnitin unless otherwise instructed by the Lecturer. (Please DO NOT put this assessment specification into Turnitin or it will match many similarities with other students' submissions.) Alternative submission method (if applicable): Late submission of the assessment will result in a late penalty mark. Penalties for late submission: Up to one week late, maximum mark of 40%. Over one week late, 0%. Only the Extenuating Circumstances Panel may approve a change to submission dates.		
Academic honesty / referencing:	Academic honesty is required. In the main body of your submission you must give credit to authors on whose research and ideas your work is based. Append to your submission a reference list that indicates the books, articles, etc. that you have used, cited or quoted in order to complete this assessment.		

Commented [PR1]: It is critical that feedback is within the 20 working days

**Module Learning Outcomes
(from module syllabus)**

1. Demonstrate knowledge and understanding of specific engineering concepts and how their theoretical characteristics are used in discipline specific engineering applications.
2. Apply practical engineering skills and demonstrate know-how of practices, skills, safety and standards with respect to laboratory and workshops.
3. Demonstrate key transferable skills in the creation of a personal development plan based on a self-evaluation of skills and demonstrate awareness of reflective practice on their application and achievement of the study skills learned.

TASK DESCRIPTION

The skills needed for higher education are ultimately gained through studying at that level; they evolve and mature through practice, trial and error, feedback from others and student reflection. This module aims to provide you with the underlying study/research strategies and software skills that can accelerate that learning process. You are encouraged to develop a reflective, active, positive approach to learning, and to take responsibility for your own learning. Such skills promote a deeper understanding of the topics studied throughout the programme; they support lifelong learning, and are the transferable skills desired in the employment context.

Task 1: This assessment requires you to produce a technical report of 2000 words on a scientific or engineering topic of your choice. The production of the report will require IT skills, secondary research, critical thinking, academic skills such as referencing and report writing convention.

You should include:

An abstract of a maximum 300 words;

A contents list

An introduction to the topic

A literature review which investigates published works on your topic. These should include books and scientific journals. It may also include websites and other sources but all sources should be reputable. The literature review should be split into subtopics and these should have headings. You may choose to use the headings formatting tools in WORD to help you and use this to generate your contents page.

Your references should be cited throughout using IEEE and a list of works cited at the end of the document.

You should upload your completed assignment to the Turn-it-in link on Moodle by the deadline. Late assessments will be capped at 40%

Task 2: Complete the EXCEL exercise on Moodle and upload your spreadsheet to the Turn-it-in link on Moodle. This assessment will be completed during the lesson.

Task 3: Give a 10 minute presentation on the same topic as your technical report. You should use a maximum of 6 Powerpoint slides. It is important to stick to the required time limit. Dates and times for your presentation will be on Moodle.

GUIDANCE FOR STUDENTS IN THE COMPLETION OF TASKS

NOTE: The guidance offered below is linked to the five generic assessment criteria overleaf.

1. Engagement with Literature Skills

Your work must be informed and supported by scholarly material that is *relevant* to and *focused* on the task(s) set. You should provide evidence that you have accessed an appropriate *range* of sources, which may be academic, governmental and industrial; these sources may include academic journal articles, textbooks, current news articles, organisational documents, and websites. You should consider the *credibility* of your sources; academic journals are normally highly credible sources while websites require careful consideration/selection and should be used sparingly. Any sources you use should be current and up-to-date, mostly published within the last five years or so, though seminal/important works in the field may be older. You must provide *evidence* of your research/own reading throughout your work, using a suitable referencing system, including in-text citations in the main body of your work and a reference list at the end of your work.

Guidance specific to this assessment: *Given that this assignment is a secondary research task, this section is very important. You should show a wide level of reading, a minimum of 20/25 references, from a variety of sources including textbooks, academic journals and academic based websites. It is perfectly permissible to include industry-focused and governmental sources. However, do not use less credible sources, for example internet sites such as Tutor2U and Wikipedia.*

The IEEE system of referencing must be employed to evidence research. Give credit to respected authors on whose work your discussion is based; this avoids accusations of plagiarism, and reflects the breadth of your research. Cite ALL of your sources - every paragraph should contain at least one in-text citation. Your use of in-text citations and the reference list at the end of the report will be closely examined to ensure that you are conforming to referencing convention. An extensive reference list and good use of in-text citations will earn marks, limited references and errors in citations will result in a loss of marks.

2. Knowledge and Understanding Skills

At level 4, you should be able to demonstrate knowledge of the underlying concepts and principles associated with your area(s) of study. *Knowledge* relates to the facts, information and skills you have acquired through your learning. You demonstrate your *understanding* by interpreting the meaning of the facts and information (knowledge). This means that you need to select and include in your work the concepts, techniques, models, theories, etc. appropriate to the task(s) set. You should be able to explain the theories, concepts, etc. to show your understanding. Your mark/grade will also depend upon the extent to which you demonstrate your knowledge and understanding.

Guidance specific to this assessment: *Based on your knowledge of the subject, select appropriate techniques, models and/or theories appropriate to your title for use in this assignment. You do not need to explain in depth the models, as this assignment is weighted more towards engagement with the research informed literature and skills for professional practice.*

3. Cognitive and Intellectual Skills

You should be able to present, evaluate and interpret qualitative and quantitative data, in order to develop lines of argument and make sound judgements in accordance with basic theories and concepts of your subject(s) of study. You should be able to evaluate the appropriateness of different approaches to solving problems related to your area(s) of study and/or work. Your work must contain evidence of logical, analytical thinking. For example, to examine and break information down into parts, make inferences, compile, compare and contrast information. This means not just describing what! But also justifying: Why? How? When? Who? Where? At what cost? You should provide justification for your arguments and judgements using evidence that you have reflected upon the ideas of others within the subject area and that you are able to make sound judgements and arguments using data and concepts. Where relevant, alternative solutions and recommendations may be proposed.

Guidance specific to this assessment: The technical report should introduce the line of reasoning, using literature to critically evaluate alternative perspectives to strengthen the argument. Avoid a biased review. Try to cite references for and against particular arguments (it also makes for more interesting reading). Be analytical. Pick the RELEVANT views. Don't just LIST the different arguments (avoid bullet points). Instead, try to link ideas, to compare and contrast views, and interpret what they mean. This will involve you having to synthesise information from different authors, combining their views in a meaningful analysis - don't over-use direct quotes as they are someone else's words, and do not fully demonstrate your skills of interpretation. Where relevant, suggest alternatives or better approaches.

4. Practical Skills

At level 4, you should be able to apply the basic underlying concepts and principles to evaluate and interpret these within the context of your area of study. You should be able to demonstrate how the subject-related concepts and ideas relate to real world situations and/or a particular context. How do they work in practice? You will deploy models, methods, techniques, and/or theories, in that context, to assess current situations, perhaps to formulate plans or solutions to solve problems, or to create artefacts. This is likely to involve, for instance, the use of real world artefacts, examples and cases, the application of a model within an organisation and/or benchmarking one theory or organisation against others based on stated criteria.

Guidance specific to this assessment: N/A

5. Transferable Skills for Life and Professional Practice

Your work must provide evidence of the qualities and transferable skills necessary for employment requiring the exercise of some personal responsibility. This includes demonstrating: that you can communicate the results of your study/work accurately and reliably, and with structured and coherent arguments; that you can initiate and complete tasks and procedures, whether individually and/or collaboratively; fluency of expression; clarity and effectiveness in presentation and organisation. Work should be coherent and well-structured in presentation and organisation.

Guidance specific to this assessment: Given that the aim of this module is to develop your personal and professional transferable skills, this section is very important.

Writing style: All writing should be academic in style, formal, focused, concise and subject specific. You should write in the third person. For example, rather than 'I found...' you should say something like 'It was evident...'. Do not use contractions (for example, it's should be it is), and avoid slang and clichés (such as 'if you pay peanuts, you get monkeys'). Be concise, don't belabour points. You don't have to use 'big' words or long sentences; the aim is to be understood. A writing style that is clear, simple and direct usually works well. Edit your work to ensure your writing style is 'tight'.

Presentation and IT skills: You should incorporate evidence of your IT skills into the production of the report. The report should be word processed using a font of Arial 12. You should use a range of word processing software features such as the automatic generation of a table of contents (e.g. via the use of outline view or by applying styles), tables/graphs, e-Referencing, use of templates. All graphs, charts and figures in the main body must be clearly labelled and referenced beside or beneath. Where possible they should not be on separate pages but should be incorporated within the text. Ensure there are no spelling errors by spellchecking your work. Also undertake a grammar check in Word, and it may help you to ask somebody to proof-read your work to identify errors.

Format and structure: You should use a report format. It should include an abstract, introduction, main findings and conclusions and the headings should be numbered. You may include sub-headings.

The structure of the report should be as follows:

Abstract: The abstract is a short summary of the entire report (no more than about half a page). It must repeat, in brief, key information found in other sections of the report and so should include the objectives, key findings and conclusions. The reader must be able to read the summary in isolation to the rest of

the report. Conversely, the reader may choose not to read the summary so do not use it as an introduction to the work. There should be a separate introduction section.

Introduction: The introduction section should give a clear idea about the central issue of concern, and why it is worth examining/ investigating. It should give the general background to the issue rather than the specific detail (which you will discuss in the main body). If the research topic relates to an organisation, give some company details. Outline the objectives of the report, what you will achieve - this serves as a 'route map' to let the reader know what to expect in the rest of the report.

Main body: This is where you discuss the main findings of your research (subject knowledge, analysis and where relevant, application – see criteria above).

Conclusion: In this section you should draw together the themes you have previously discussed (synthesis). Try not to just re-hash the discussion from the main body; ask yourself questions such as 'so what?', 'what does this mean?', 'what are the implications for the organisation, its stakeholders,...industry...the future...etc.?' Ensure you have addressed the objectives you laid out in the introduction section.

References: Numerical list of authors and their work cited in the report. Use the IEEE system of referencing.

Appendices: where relevant. Avoid 'padding'

Essential Resources:

- Resources listed on the lecture schedule and on Moodle
- The student handbook

STUDENT FEEDBACK FORM

This section details the *extent* to which the assessment criteria are demonstrated by you, which in turn determines your mark. The marks available for each category of skill are shown. Lecturers will use the space provided to comment on the achievement of the task(s), including those areas in which you have performed well and areas that would benefit from development/improvement.

Generic Assessment Criteria	Marks available	Marks awarded
1. Engagement with Literature Skills		
****	30	
2. Knowledge and Understanding Skills		
****	5	
3. Cognitive and Intellectual Skills		
****	25	
4. Practical Application Skills		
N/A	0	
5. Transferable Skills for Life and Professional Practice		
****	40	

Commented [PR2]: Provide feedback in each section that relates to the assessment criteria below.

For example,
Do not give a mark of 35% and then say "Engagement with an appropriate range of literature. Referencing may show minor inaccuracies or inconsistencies."
This would suggest that a much better mark should be awarded.

Commented [PR3]: There does not have to be a mark assigned to every section, just those that are applicable.

Assessment Mark (Assessment marks are subject to ratification at the Exam Board. These comments and marks are to give feedback on module work and are for guidance only until they are confirmed.)	Late Submission Penalties (tick if appropriate)		%
	Up to 1 week late (40% Max)		
	Over 1 week late (0%)		

GENERIC ASSESSMENT CRITERIA

Level 4

In accordance with the Framework for Higher Education Qualifications, at the end of Level 4 students will be expected to have demonstrated knowledge of the basic underlying concepts and principles of a subject, and an ability to evaluate and interpret these within the context of that area of study. They should be able to present, evaluate and interpret qualitative and quantitative data in order to develop lines of argument and make sound judgements in accordance with basic theories and concepts of their subject(s) of study. They will have learned how to evaluate different approaches to solving problems, and will be able to communicate the results of their study/work accurately and reliably, and with structured and coherent arguments. They will be able to undertake further training and develop new skills within a structured and managed environment and will have the qualities and transferable skills necessary for employment requiring the exercise of some personal responsibility.

Level 4	FAIL	MARGINAL FAIL	SATISFACTORY (3 rd / Pass)	GOOD (2.2 / Pass)	VERY GOOD (2.1 / Merit)	EXCELLENT (1 st / Distinction)	EXCEPTIONAL (1 st / Distinction)
Category	0-29%	30-39%	40-49%	50-59%	60-69%	70-84%	85-100%
Engagement with literature (including reading, referencing, academic conventions and academic honesty)	Little or no evidence of reading and/or reliance on inappropriate sources. Views and findings mostly unsupported and non-authoritative. Referencing conventions used incoherently or largely absent.	Poor engagement with essential reading. No evidence of wider reading. Reliance on inappropriate sources, and/or indiscriminate use of sources. Heavily reliant on information gained through class contact. Inconsistent and weak use of referencing.	Engagement with a limited range of mostly relevant and credible sources but with some reliance on information gained through class contact. Some omissions and minor errors. Referencing conventions evident though not always applied accurately or consistently.	Engagement with an appropriate range of literature, including sources retrieved independently. Some over-reliance on texts rather than other sources. Referencing may show minor inaccuracies or inconsistencies.	Engagement with a wide range of literature, including sources retrieved independently. Selection of relevant and credible sources. Generally sound referencing, with no/very few inaccuracies or inconsistencies.	Engagement with an extensive range of relevant and credible literature. Consistently accurate application of referencing.	Exceptional engagement with an extensive range of relevant and credible literature. High-level referencing skills consistently applied.
Knowledge and understanding (Knowledge of the basic underlying concepts and principles of a subject.)	Major gaps in knowledge and understanding of the basic underlying concepts and principles of the subject matter. Inclusion of	Gaps in knowledge of the basic underlying concepts and principles, with flawed or superficial understanding. Some significant	Limited knowledge and understanding of the basic underlying concepts and principles within the subject area.	Knowledge of the basic underlying concepts and principles is accurate with a good understanding of the field of study	Competent knowledge of the basic underlying concepts and principles. Exhibits very good understanding.	Excellent knowledge and understanding of the basic underlying concepts and principles of the subject.	Exceptional, detailed knowledge and understanding of the basic underlying concepts and principles

Level 4	FAIL	MARGINAL FAIL	SATISFACTORY (3 rd / Pass)	GOOD (2.2 / Pass)	VERY GOOD (2.1 / Merit)	EXCELLENT (1 st / Distinction)	EXCEPTIONAL (1 st / Distinction)
Category	0-29%	30-39%	40-49%	50-59%	60-69%	70-84%	85-100%
	irrelevant material. Substantial inaccuracies.	inaccuracies and/or irrelevant material.	Some elements may be missing.	but lacks depth and/or breadth.			
Cognitive and intellectual skills (Evaluate underlying concepts and principles of a subject and interpret qualitative and quantitative data in order to develop lines of argument and make sound judgements.)	Wholly or almost wholly descriptive work. Little or no evaluation of the underlying concepts and principles. Failure to develop arguments, leading to illogical or invalid judgements. Minimal or no use of evidence to back up views.	Largely descriptive work, with superficial evaluation of the underlying concepts and principles. Weak interpretation of data, flawed development of arguments and judgements. Information accepted uncritically, uses generalised statements made with scant evidence and unsubstantiated opinions. Ideas sometimes illogical and contradictory.	Limited attempt at evaluation of the underlying concepts and principles, tending towards description. Can interpret qualitative and quantitative data but with some errors. Some evidence to support emerging arguments and judgements but these may be underdeveloped or with a little inconsistency / mis-interpretation.	Good evaluation of the underlying concepts and principles. Can interpret qualitative and quantitative data, with minor errors. An emerging ability to use evidence to support the argument. Mostly valid arguments and logical judgements.	Sound evaluation of the underlying concepts and principles. Can interpret qualitative and quantitative data accurately. Ability to devise arguments using evidence to make mostly appropriate and valid judgements.	Excellent evaluation of the underlying concepts and principles. Can interpret qualitative and quantitative data accurately and with some insight. Excellent ability to devise arguments using evidence and make appropriate and valid judgements.	Exceptional evaluation of the underlying concepts and principles based evidence. Outstanding interpretation of qualitative and quantitative data. Exceptional ability to devise arguments using evidence and make wholly appropriate and valid judgements.
Practical skills (Different approaches to solving problems in particular contexts.)	Limited or no use of taught, basic methods, materials, tools and/or techniques. Little or no appreciation of the context of the application. Very weak evidence of different	Rudimentary application of taught, basic methods, materials, tools and/or techniques but without consideration and competence. Flawed appreciation of	An adequate awareness and mostly appropriate application of basic methods, materials, tools and/or techniques. Basic appreciation of the context of the application.	A good and appropriate application of basic methods, materials, tools and/or techniques. Clear appreciation of the context of the application. Good evidence of different	A very good application of a range of basic methods, materials, tools and/or techniques. Very good consideration of the context of the application. Very good evidence of	An advanced application of a range of taught, basic methods, materials, tools and/or techniques. The context of the application is well considered, and insightful. Excellent evidence of	Exceptional levels of application and deployment skills in particular practical contexts. Outstanding identification of problems in particular contexts and

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Category	0-29%	30-39%	40-49%	50-59%	60-69%	70-84%	85-100%
	approaches to problem-solving in particular contexts.	the context of the application. Weak evidence of different approaches to problem-solving in particular contexts.	Can identify problems in particular contexts and propose basic alternative approaches or solutions though there may be errors.	approaches to problem-solving in particular contexts and proposes mostly appropriate solutions.	different approaches to problem-solving in particular contexts and proposes appropriate solutions.	different approaches to problem-solving in particular contexts and proposes appropriate solutions.	formulation of wholly appropriate, thoughtful solutions / different approaches.
Transferable skills for life and professional practice (Communicate the results of their study/work accurately and reliably, and with structured and coherent arguments; the qualities needed for employment requiring the exercise of some personal responsibility within a structured and managed environment.)	Work is poorly structured, disorganised, inaccurate and/or confusingly expressed. Very weak use of language and/or very inappropriate style. Failure to work effectively individual or as part of a group. Little or no evidence of the skills for employment requiring the exercise of some personal responsibility.	Work is poorly presented in a disjointed manner. It is loosely, and at times incoherently, structured, with information and ideas often poorly expressed. Weak use of language and/or inappropriate style. Flawed approach to individual or group work, meeting only partial obligations to others. Limited evidence of the skills for employment requiring the exercise of some personal responsibility.	Mostly ordered presentation and structure in which relevant ideas / concepts are reasonably expressed. Work may lack coherence and/or accuracy in places. Can work as part of a group, meeting most obligations to others but perhaps with limited involvement in group activities. Demonstrates the basic skills for employment requiring the exercise of some personal responsibility, with some areas of minor weakness.	Mostly coherent, organised and accurate work, in a suitable structure and is for the most part clearly expressed. Can work effectively independently and/or as part of a team, with clear contribution to group activities. Demonstrates the skills for employment requiring the exercise of some personal responsibility, with some areas of strength and some of minor weakness.	Work is accurate, coherent, fluent, well-structured and organised. Can work effectively independently and/or as part of a team, with very good contribution to group activities. Demonstrates very good skills for employment requiring the exercise of some personal responsibility, with just occasional minor weakness.	Work is coherent, very fluent and is presented professionally. Can work effectively independently and/or as part of a team, with an excellent contribution to group activities. Demonstrates excellent skills for employment requiring the exercise of some personal responsibility with an appetite for further development.	Work is accurate, exceptionally coherent, very fluent and presented well. Can work effectively independently and/or as part of a team, with an exceptional contribution to group activities. Demonstrates exceptional skills for employment requiring the exercise of some personal responsibility with an appetite for further development.

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