

Assessment Guidance for SCSE, RRSM and JLR TAS Masters level assessments

This page contains general advice on how to approach the assessments that are set for modules taught by the University of York on the Safety Critical Systems (SCSE), Railway Risk and Safety Management (RRSM) and Jaguar Land Rover Technical Accreditation Scheme (JLR TAS) programmes.

The advice is organised into the following sections:

- A. Additional notes on assessment marking
- B. Marking Criteria for Projects
- C. General Approach to Assessments
- D. Vocabulary
- E. Incomplete Data
- F. Citations and References in Open Assessments
- G. Format and Presentation of Open Assessments

You should also study the marking criteria, which outline the standards that the examiners are looking for.

A. Additional notes on assessment marking:

1. Examiners want to see evidence of candidates' thoughts and understanding.
 - Marks will be given for the presentation and evaluation of views and ideas, and for justified and well-supported conclusions.
2. The marks awarded will reflect how well the material submitted answers the specific question that has been asked.
 - A short, relevant answer will attract more marks than a long, irrelevant essay, no matter how interesting.
3. Where a question requires the application of a particular method or technique, marks will reflect how well that specific activity has been carried out.
 - There will be no marks for applying methods other than that required.
 - The method should be applied as it has been defined and described in the lectures or standard reference texts, bearing in mind hints and guidance that have been given about good practice or common errors to avoid.
 - If a candidate believes there is justification for deviating from the standard method, it is essential that this justification is carefully presented and explained.
 - If a question requires an analysis but does not specify a method, marks will be allocated for the selection and justification of (an) appropriate method(s) as well as for the application of the chosen technique(s).
4. If a question requires a calculation, proof or similar activity, marks will be allocated for the method.

- Candidates must show all working. If a candidate presents an answer (even if correct) without showing how it has been achieved, this may result in no marks being awarded for that answer.
5. Part of the purpose of assessment at MSc level is to evaluate candidates' ability to identify, structure and prioritise the information that should be presented in response to a question.
- Some assessments will contain questions with a single large mark allocation. The marks awarded for this type of question will reflect the organisation and structure of the answer, as well as the accuracy of the information presented.
 - Some tasks, especially on open assessments, may be expected to generate a lot more output than can be included in the assessment submission (for example, application of certain analysis techniques). In this case, the mark awarded will reflect how well the candidate has selected material to demonstrate the approach they have taken and the key conclusions they have reached.
6. Some open assessment questions are designed to provide examiners with evidence that candidates are capable of carrying out original research.
- Where appropriate, candidates are expected to not just repeat material from the lectures or module reference texts but to seek out state of the art knowledge from their own reading to complete the assessment.
 - The marks awarded will reflect the quality of this background work (e.g. how well literature citations are "focused" on the specific question).
7. There are no marks awarded for presentation, spelling and grammar (and accordingly no penalties for poor presentation, spelling or grammar).
- Procedures exist for candidates to declare dyslexia or similar disabilities<link> which may impact the quality of their written work. These procedures must be followed for *every* assessment submitted.

HOWEVER

- Work must demonstrate candidates' understanding through careful structuring and clear, accurate writing
- If it is difficult to read, interpret or understand the points being made, the effect may be that the candidate fails to demonstrate their understanding.

IN PARTICULAR

- Answers submitted to open assessments are expected to be neat and well presented.
 - Candidates are expected to have read and reviewed their own work before submission.
 - For assessments submitted electronically, high quality scans of hand-written answers and hand-drawn diagrams are acceptable *provided* they are legible on screen and when printed.

B. Marking Criteria for Projects

There are detailed marking criteria published for the three different project reports associated with the SCSE, RRSB and JLR TAS programmes. These can be found at:

[PRCE PRCE Marking criteria](#) <text link>

[PRCM PRCM Marking criteria](#) <text link>

[PRCP PRCP Marking criteria](#) <text link>

C. General Approach to Assessments

1. The examiners want to see evidence of candidates' thoughts and understanding. Remember, an assessment is quite different to the sort of reports you may be used to writing for work. An open assessment is not something that gets drafted, commented on, updated, reviewed and revised – except by yourself, of course. What you hand in should reflect your knowledge and understanding as best you can manage.
2. Ideas, and the expression of those ideas, are far more important than perfect presentation... so spend time on the substance, not the appearance. So long as it's neat and legible, that's sufficient.
3. A good answer to a question on an open paper may require reading beyond what was covered in the course material. You need to get organised to achieve this.
4. READ the question, THINK about what it's asking, and ANSWER THE QUESTION. No matter how interesting your submission is, if it doesn't answer the question there will be no marks for it in the mark scheme. Short but relevant answers will attract more marks than a long, irrelevant essay.
 - The examiners try very hard to ensure that the questions that are set are clear and unambiguous.
 - The examiners do not set “trick” questions. All questions are intended to be straightforward questions requiring straightforward answers.
 - If you genuinely do not know how to interpret a question on an open assessment, or are unclear what is required, use the facility provided (usually via the VLE) to ask for clarification. As there is a cut-off date for asking for clarification, this means you need to get started on open assessments in good time.
5. Use the marks for each part of the question as an approximate guide to how much time to spend / space to use writing up your answer. The examiners try very hard to allocate marks according to how much work we think each question entails, so the mark allocation gives you some clues to our expectations.
6. If you generate a lot of material, and you think it's all relevant, force yourself to be selective. Which are the key ideas? What are the very best examples? This is particularly important for open assessments, where you may generate a lot of analysis output, for example. In these cases, you may need to include just sufficient of the original material to show your approach, then summarise the key conclusions from the rest of the work.

7. When writing an open assessment, aim to complete it in good time. Leave your answer a couple of days, then re-read it. Is it in good English? Have you managed to express your thoughts coherently? Do you still think it answers the question?

D. Vocabulary

Certain words and phrases have specific meanings when they appear in an assessment question.

The table below identifies several common "question prompts" and words with special meanings in questions, and explains what they mean.

It is important to note that this table is provided *for guidance only*. You should always read the assessment paper carefully, and consider how to interpret words *in the context in which they appear in the question*.

Analyse	To examine closely	<ul style="list-style-type: none"> • Determine (and justify) an appropriate method. • Break the subject into parts and investigate each. • Connect the parts to reach and justify a conclusion.
Argue	To exhibit or prove by reasoning	<ul style="list-style-type: none"> • State your position/claim on the subject. • List and justify (support with evidence) reasons for your position/claim. • Identify objections to your position/claim (or the reasons for your position) and propose defences to these objections. • Fill out reasons, objections, and defences with details, examples, consequences, logical connections, and so on.
Apply [an analysis]	To use a specific method	<ul style="list-style-type: none"> • Work as if you were applying the required analysis technique on a real system. • Unless instructed otherwise (or there is a very strong justification), apply the technique as presented in the lectures or in standard reference materials. • If you decide it is justifiable to

		<p>deviate from the standard method, explain your rationale.</p> <ul style="list-style-type: none"> • Be careful to consider advice given in the lectures about good practice and common errors to avoid. • If necessary, be selective about which results to present - perhaps a small amount of detailed working to show the approach, then pick out key results.
<p>Brief, briefly (as in "present a brief analysis...")</p>	<p>Present key points as concisely as possible</p>	<p>Where a question asks you to provide a <i>brief</i> answer, the correct interpretation is that you should work out the points required for a <i>full</i> answer, and then present the key points. Brief should NOT be interpreted as meaning "do a small part of the task".</p> <p>For example, "conduct a brief hazard analysis" should be interpreted as "identify ALL the hazards, and present minimal key information about each", NOT as "list the first few hazards that occur to you".</p>
<p>Calculate</p>	<p>To determine by mathematical process</p>	<ul style="list-style-type: none"> • State given data and assumptions. • Identify methods of working (e.g. state whether calculation is exact or using simplifying approximations). • Show all working.
<p>Comment</p>	<p>To make statements about something</p>	<ul style="list-style-type: none"> • Approach as for discuss.
<p>Compare</p>	<p>To give similarities and differences of two or more items</p>	<ul style="list-style-type: none"> • Make a list of bases for comparing and contrasting. • For each basis, judge similarities and differences. • Supply details, examples, etc., that will support and clarify your judgement. • Assess overall similarity or difference. • Determine significance of similarities and difference with respect to the purpose of the comparison.
<p>Consider</p>	<p>A synonym for "discuss"</p>	
<p>Criticise</p>	<p>To judge the good</p>	<ul style="list-style-type: none"> • Make a list of the good points and

	and bad points of something	<p>bad points of the subject.</p> <ul style="list-style-type: none"> • Develop details, examples, contrasts, etc., to support and illustrate your judgements. • Make an overall judgement of quality.
Define	To state the meaning of (a word etc.); to describe (an entity) precisely	<ul style="list-style-type: none"> • If there is an accepted existing definition (e.g. from a standard), state that definition and cite the source. • Otherwise, state the required facts as clearly and precisely as possible in your own words.
Demonstrate	To show something	<ul style="list-style-type: none"> • Provide evidence, clarify the logical basis of something, appeal to principles or laws as an explanation.
Describe	To set out the qualities or properties of something	<ul style="list-style-type: none"> • Pick out highlights or major aspects of the subject. • Develop details, illustrations, and the like to give a clear picture.
Develop [an argument...]	To bring to light gradually; to work out; to bring from a simple to a complex state	<ul style="list-style-type: none"> • State starting point(s) - data provided, known facts etc. • Combine facts logically, or extrapolate from known facts, as required. • Provide rationale (e.g. to explain your approach) where necessary. • Clearly state assumptions and justifications.
Discuss	To consider or examine by argument	<ul style="list-style-type: none"> • Determine a list of points of discussion (relevant items or issues). • Prioritise the points of discussion. • Examine each point in turn, using data, references and examples where appropriate to support your position. • State and justify the conclusions you reach.
Evaluate	To determine the value or worth of, to appraise	<ul style="list-style-type: none"> • Determine criteria (goals, ideals) from which you can judge something's worth. • Make value judgement (or judgements) based on your criteria.

		<ul style="list-style-type: none"> Develop details (examples, evidence) which support your judgement and clarify your reasoning.
Explain	To show the causes of or reasons for something	<p>Depending on the subject of the question, either:</p> <ul style="list-style-type: none"> Show what leads to what in producing something or causing a result, thoroughly presenting details of each step <p>or:</p> <ul style="list-style-type: none"> Make a list of factors that influence something, presenting evidence for each factor's potential influence.
Identify (as in "identify the causes...")	To establish, to pinpoint	<ul style="list-style-type: none"> Decide on an appropriate method / technique, state and justify what you are using. Apply the technique systematically. List results, ensuring that items are adequately defined.
Justify	To prove or show to be just or right; to show grounds for	<ul style="list-style-type: none"> Explain (a point of view or conclusion); give reasons for; show just cause for; show to be reasonable.
May	An option	Something you can decide whether or not to do (e.g. "the results <i>may</i> be presented in GSN notation").
Must	A requirement	Something that it is essential to do, or to include in your answer (e.g. "all working <i>must</i> be shown"). Marks will usually be allocated for the thing that is required.
Shall	A requirement	See must .
Should	A strong intention	Something that it is strongly intended / highly desirable to do, or to include in your answer (e.g. "results <i>should</i> be presented in tabular form"). If you choose not to do this, a justification must be given, otherwise marks may be lost.
State	To set forth explicitly in speech or writing	<ul style="list-style-type: none"> Write the required facts as clearly and precisely as possible, with an appropriate degree of formality (e.g. if you are stating a physical quantity,

		ensure you state the unit of measurement).
--	--	--

E. Incomplete Data

If you find that a question which provides concrete information (e.g. a description of a system as the basis for a set of tasks) does not include all the information you think you need to complete those tasks, you should state this clearly in your answer.

If data is missing, state what is missing, or use a "place-holder"; do not "invent" data.

For example, in a question which asks you to derive safety requirements for a control system, it may be clear that the control system has to react quickly to shut the system down if there is a problem. If the system description doesn't contain the information you need to calculate the actual reaction speed, it is appropriate to state "In case of error the control system must shut the system down quickly (time limit TBD)", or "... within X ms (TBD)". Putting in an "invented" figure ("... within 25ms") is not good practice. You would not (or certainly should not) do this for a real system, so don't do it with an assessment example either.

F. Citations and References in Open Assessments

The Department's required style for citations in final project reports is the IEEE style; there is an [online guide](#) to using this referencing style, and it is a good idea to use it for open assessments so that you become familiar with it.

Although the IEEE style is *preferred*, it is not mandated for open assessments, and any sensible citation style is acceptable.

The "classic" formats are "Numbered" (as per the IEEE) and "Author/Date".

- In the "Numbered" format, references in the text appear as [12]. In the bibliography, papers are listed numerically in order of appearance in the body of the text.
- In the "Author/Date" format, references in the text appear as [Lowson 2001]. If you cite more than one paper published by the same author in a single year, you use [Lowson 2001a], [Lowson 2001b] etc. If you adopt this style, when you cite a reference, you need not repeat the author's name or authors' names ("Lowson [Lowson 2001] has shown ..."). Write instead: "Lowson [2001] has shown ...". In the bibliography, papers are listed alphabetically by first author.

It is preferable to include separate bibliographies for each question in an open assessment, as there may be different markers for each question. You must include all bibliographies / reference lists within the page limit.

As well as books, papers and electronic documents, the source of information obtained by personal communication should also be cited. For example, if you obtained information you needed for your answer by telephoning John Smith who works for Widgets Ltd., the conversation should be cited in your answer and included in the references as "John Smith (Widgets Ltd), Personal communication, 23 October 2014".

In deciding what material needs a cited source, the general rule to follow is that things that are "common knowledge" do not need citation. However, anything you have looked up, and any direct quotes, must have cited sources. Passing off others' work as your own is considered a serious academic offence.

G. Format and Presentation of Open Assessments

There are no specific regulations governing the format of open assessment submissions, other than the page limit stated in the question paper, and the requirement to put your student number (and no other form of identification) on each page.

However, you should try to adhere to the following rules:

Document style

- Pages should normally be A4; this is the size assumed in the page limit stated in the assessment.
- Stick to a straightforward style, i.e. use a standard font such as Times Roman, with reasonable margins. If you are using Microsoft Word, the default document style is fine.
- Keep the font size reasonable - 11 point is easy to read; anything smaller than that is difficult.
- Apply "good writing rules". For example, make sure you use paragraphs appropriately in your writing. An unbroken page of text is difficult to read, and can imply that you have not given sufficient thought to the organisation of your ideas.

Question identification and numbering

- Make sure you clearly identify which question (including sub-question) you are answering. You should use the same numbering scheme for your answer as in the question paper (i.e. if the question paper has Question 2 parts i) to iv), so should your answer - don't use 2 a) to d) or whatever). If you are using auto-numbering in Word, it is worth a final check to ensure that the final pdf you create has the numbering you intended - it is very easy to get unexpected effects if you change the definition of a numbered or bulleted paragraph style.
- There is no requirement to include a copy of (any part of) the question paper with your submission. However, quoting a *small amount* of the text of the sub-questions can be a good idea, as it can help to make it clearer to the marker which part of the question you are answering, and can also make it easier for you to do a final read-through to check that your answer properly addresses the question. If you choose to do this, don't waste space quoting too much.

Tables and Diagrams

- Make sure tables and diagrams are titled.

- It can be sensible to use landscape format pages for tables and diagrams. However, text that extends right across a landscape format page is especially difficult to read, and should be avoided.
- There is no need to use a drawing tool to produce diagrams. Good quality scans of neat hand-drawn diagrams are perfectly acceptable.
- It is acceptable to use A3 page size for large tables and diagrams - indeed, it is preferable to do so rather than reduce them to a size where text becomes unreadably small. Each A3 page will be counted as two pages.
- It is acceptable to reproduce tables and diagrams from reference material provided that the source is correctly cited. However, unless you use it constructively in your answer, a large picture or diagram that someone else has drawn – no matter how attractive – will not attract any marks. Beware of wasting space that could be used more profitably.