

# Progress Report and Presentation

## EGH400-1 RESEARCH PROJECT 1, SEMESTER 2 2022

Assessment #	2
Unit Learning Outcomes Assessed	<p>ULO3 Formulate a progress stage towards the solution of an engineering problem that responds to risk, ethics, and sustainability considerations at a mastered level.</p> <p>ULO4 Report progress of a project that addresses an engineering problem using written and oral communication at a mastered level.</p> <p>ULO5 Practise professionally in the collaborative environment of an engineering project at a mastered level.</p>
Task Weight (%)	60%
Due Date	Week 13, 11:59pm 26 October 2022 (Written submission), during exam period (Oral presentation)
Nature of Submission	<p>Written Report, 15 pages (reference and appendix are not counted in this 15 page limit), in alignment with the Engineering Technical Report Style Guide</p> <p>Oral presentation: 12 minutes allocation, incorporating 7 to 10 minutes of presentation and 2 to 5 minutes of answering questions.</p>

### Overview

Engineers regularly give updates on project work to other members of the engineering team. In this assessment you will produce a written report on your project to date and a summary oral presentation of your achievements, challenges, and next steps. You will be questioned at the conclusion of your oral presentation to justify and defend your engineering decisions and progress. You should refer to the Engineers Australia [Stage 1 Competency Standard for Professional Engineer](#) to provide context for this aspect of engineering practice.

### What you will do

You will prepare a Written Report outlining your progress to date on your Engineering Research Project. Following submission of this written report, you will then give an Oral Presentation with a summary of your achievements (interim deliverables) and answer questions from a panel of academic supervisors and fellow students.

Your written report should incorporate sections relevant to your project to convey the work you have completed on your project in this semester. It must include sections that address:

- A short summary of your project and the expected outcomes.
- Interim deliverables that have already been achieved, including any designs, drawings, experimentation, testing, or analysis. You should incorporate images, graphs, visualisations, and engineering drawings relevant to your project. Ensure you consider the reader in formatting and naming any visual inclusions.
- How you have addressed the management of risk (health and safety, and any other risks) in the project so far and any emergent issues you have identified to be managed in the rest of the project.
- How you have considered ethics in decision making for the conduct and completion of your project. You should connect this with specific mention of areas of the Engineers Australia [Code of Ethics](#) and Guidelines for Professional Conduct that are pertinent to your project work.
- Ways in which you have considered the implementation of sustainable development principles within your project (see Engineers Australia [Implementing Sustainability: Principles and Practice](#)).
- Any information or resources that you have drawn on to inform your project work and decisions, including any codes, regulations, or standards that impact your work.
- Stakeholder, industry partner, or other input into the project that has supported or impacted on progress.

You should include as an appendix any updates to the Timeline and Deliverables (included completed deliverables) you proposed within your Project Proposal, identifying reasons for changes and updates. If you have identified further research literature to support your project, this should be referenced.

Your oral presentation should present a summary of your project progress to date and will be in person on campus. You will be allocated 12 minutes for your presentation, which includes 7 to 10 minutes for presentation and 2 to 5 minutes for questions. You need to carefully structure and organise your presentation and manage your time. Your audience will be a panel of academic supervisors and fellow students, so consider ways in which you can engage and inform your audience. Your presentation should include:

- A short overview of your project and the interim deliverables you have already achieved. You may use text, diagrams, images, graphics, or visualisation to convey your message. Choose this with consideration of your audience.
- Your reflections on what has been progressing well.
- Your reflections on any challenges or difficulties and how you have mitigated these to ensure project progress.

Your presentation should make effective use of presentation technology and give due consideration to the audience, including choosing fonts, images, colours, and other visuals that clearly convey your message.

#### **What you will submit/present (what artefacts will be used to judge your performance?)**

Your written report should be submitted via the unit Blackboard site as a Word document file (i.e., docx). You **MUST** ensure that your report formatting meets the Engineering Technical Report Style Guide.

You should prepare your oral presentation in a format that can be uploaded to the QUT Standard Operating Environment for presentation in the room you have been allocated to. Your presentation slides should be submitted via the unit Blackboard site prior to your allocated presentation time. No template is provided for your presentation slides. You are strongly encouraged to practice your presentation and become familiar with the presentation technology before your scheduled presentation time.

#### **Criteria for Assessment**

There are four criterion that will be used to assess your submission:

1. **Engineering knowledge (weight: 20 marks)** – extent to which project progress demonstrates knowledge of contemporary engineering practice particularly with respect to risk, ethics, and sustainability.
2. **Engineering research application (weight: 20 marks)** – application of systematic engineering techniques, tools, and resources to an engineering research project to achieve outcomes and manage challenges, demonstrating appropriate progress towards the project deliverables and outcomes.
3. **Professional communication: Written (weight: 10 marks)** – effectiveness of written communication in presenting engineering work, that is succinct, justified, and clear including effective use of textual, diagrammatic, pictorial, and graphical media suited to the project context.
4. **Professional communication: Oral (weight: 10 marks)** – choice of presentation media, structure of presentation and quality of delivery with regard to clarity, timing, and audience engagement.

The attached marking rubric outlines the standards required to achieve a grade against each criterion.

**Criterion 1 and Criterion 2 will draw on evidence from the written report, oral presentation, and your answers to questions at the end of the presentation.**

**Criterion 3 will draw on evidence from the written report.**

**Criterion 4 will draw on evidence from the oral presentation and answers to questions.**

Note that in class lectures and meetings with your supervisor will provide you with details of how your mark will be determined.

#### **Resources and Support Available**

##### **Lectures**

Week 5: Professional & Technical Communication: Writing

Week 11: Professional & Technical Communication: Presentations

**Support**

Library: Attend week 3 lectures and then contact your Liaison Librarian

Student Success: Book an appointment or attend a workshop at [qut.to/academicsupport](http://qut.to/academicsupport)

**Resources**

Engineering Technical Report Style Guide

Library Guide: <https://libguides.library.qut.edu.au/engcap>

Check the unit Blackboard site for other useful resources related to writing and presentation.

**Academic Integrity Statement**

You are reminded that maintaining academic integrity is an important professional capability in all assessment. See the QUT [MOPP C/5.3 Academic Integrity](#) and the Engineers Australia [Code of Ethics](#) and Guidelines on Professional Conduct. For this assessment academic integrity will be monitored via:

- Interactions with your supervisor where you should discuss the details of your project and the preparation of your report and presentation.
- Plagiarism detection during submission via Turnitin.
- Questions from a panel of markers and fellow students.

In finalising your mark, you may be asked to verify aspects of your submission through an interactive oral. Note that if the Unit Coordinator has reasonable concerns about your academic integrity, they may ask you to authenticate your learning in line with MOPP C/5.3 Section 5.3.7 (e) *Authentication of learning*.

## MARKING RUBRIC

REF	CRITERIA	7	6	5	4	3	2	1
<b>1.0</b>	<b>Engineering knowledge</b>							
/20	<p>Extent to which project progress demonstrates knowledge of contemporary engineering practice particularly with respect to risk, ethics, and sustainability.</p> <p>(Evidence for this criterion will be drawn from both the written report, oral presentation and answers to questions at the end of the presentation).</p>	<p>Comprehensive knowledge of contemporary engineering practice in domain of research project.</p> <p>Sophisticated analysis, insight, and interpretation of risk, ethics, and sustainability covering all significant areas pertinent to the research project.</p>	<p>Significant knowledge of contemporary engineering practice in domain of research project.</p> <p>Thoughtful analysis and some insight and interpretation of risk, ethics, and sustainability covering most significant areas pertinent to the research project.</p>	<p>Important knowledge of contemporary engineering practice in domain of research project.</p> <p>Reasonable analysis and insight into impact of risk, ethics, and sustainability in pertinent areas of the research project.</p>	<p>Reasonable knowledge of contemporary engineering practice in domain of research project.</p> <p>Recognition of significance of risk, ethics, and sustainability in pertinent areas of the research project, with some analysis and insight into impact.</p>	<p>Some areas of contemporary engineering practice in domain of research project not addressed.</p> <p>Limited or unclear analysis of risk, ethics, and sustainability for research project.</p>	<p>Missing key areas of contemporary engineering practice in domain of research project. Missing analysis or consideration of risk, ethics, or sustainability for research project.</p>	No submission
<b>2.0</b>	<b>Engineering Research Application</b>							
/20	<p>Application of systematic engineering techniques, tools, and resources to an engineering research project to achieve outcomes and manage challenges, demonstrating appropriate progress towards the project deliverables and outcomes.</p>	<p>Systematic and thorough application of engineering research methodologies, highly appropriate to project topic. Comprehensive strategies for addressing emergent challenges</p>	<p>Comprehensive application of engineering research methodologies, highly appropriate to project topic. Thoughtful strategies for addressing emergent challenges and effective progress towards project outcomes.</p>	<p>Considered application of engineering research methodologies, appropriate to project topic. Useful strategies for addressing emergent challenges and reasonable progress made</p>	<p>Appropriate application of reasonable engineering research methodologies, applicable to project topic. Has addressed most emergent challenges and making reasonable</p>	<p>Some required aspects of engineering research methodologies not addressed or applied inappropriately. Emergent challenges considered, but</p>	<p>Missing major components of engineering research methodologies required for project completion. Emergent challenges not addressed.</p>	No submission

REF	CRITERIA	7	6	5	4	3	2	1
	(Evidence for this criterion will be drawn from both the written report, oral presentation and answers to questions at the end of the presentation).	and effective and efficient progress towards project outcomes.		towards project outcomes.	progress towards project outcomes.	not always addressed. Some progress towards outcomes.	Little progress towards outcomes.	
<b>3.0</b>	<b>Professional Engineering Communication: Written</b>							
/10	<p>Effectiveness of written communication in presenting engineering work, that is</p> <ul style="list-style-type: none"> <li>succinct, structured, justified, and clear</li> <li>includes effective use of textual, diagrammatic, pictorial, and graphical media suited to the project context.</li> </ul> <p>(Evidence for this criterion will be drawn from the written report)</p>	<p>Masterful written communication (at the standard of a Professional Engineer) including structuring and organisation of report.</p> <p>Writing shows very effective consideration of audience.</p> <p>Report is concise and complete, clearly conveying progress of engineering work.</p> <p>Graphs, diagrams, or pictures make significant contribution to overall report readability.</p>	<p>Highly effective written communication with clear structure and organisation of report. Writing shows effective consideration of audience. Report is concise and complete in all pertinent areas, conveying progress of engineering work. Graphs, diagrams, or pictures used to excellent effect on report readability.</p>	<p>Effective written communication with structure and organisation evident in report. Writing shows good consideration of audience. Report is concise and complete in most pertinent areas, conveying progress of engineering work. Graphs, diagrams, or pictures used to contribute to report readability.</p>	<p>Mostly clear structure and organisation of report. Writing shows some consideration of audience. Reasonably concise, with some redundancy, and all major areas covered to show progress of engineering work.</p> <p>Most graphs, diagrams, or pictures contribute to report readability.</p>	<p>Lack of clear structure and organisation in report. Writing uses jargon or confusing language, with no consideration of audience. Longer than necessary with redundancy or missing components so that progress of engineering work is not clear. Inappropriate use of graphs, diagrams, or pictures.</p>	<p>No structure or organisation in report. Unclear language. Longer or shorter than is necessary to convey progress of engineering work. No or inappropriate use of graphs, diagrams, or pictures.</p>	No submission

REF	CRITERIA	7	6	5	4	3	2	1
4.0	Professional Engineering Communication: Oral							
/10	<div>Effectiveness of oral communication, incorporating:<ul style="list-style-type: none"><li>Choice of presentation media,</li><li>Structure and organisation of presentation, and</li><li>quality of delivery with regard to clarity, timing, and audience engagement.</li></ul><div>(Evidence for this criterion will be drawn from the oral presentation, including answers to questions)</div></div>	<div>Sophisticated use of presentation media to convey meaning. Well structured presentation with organised transitions and within time limits.</div> <div>Effective engagement of audience through modulation of voice, use of effective speech patterns and enthusiasm for topic.</div>	<div>Highly effective use of presentation media to convey meaning. Clearly structured presentation with transitions and within time limits.</div> <div>Engagement of audience through modulation of voice, use of effective speech patterns and clearly conveying interest.</div>	<div>Effective use of presentation media to convey meaning. Structure of presentation is clear and within time limits. Engagement of audience through clear voice and showing interest in the topic.</div>	<div>Mostly effective use of presentation media, conveying meaning. Some structure to presentation. Spoken in clear voice and within time limits.</div> <div>Conveys interest in topic to engage audience.</div>	<div>Use of presentation media not effective. Disorganised presentation outside of time limits. Voice unclear in some sections. Little attempt made to consider or engage audience.</div>	<div>Poor, unclear or inappropriate use of presentation media. Disorganised and outside time limits.</div> <div>Mumbled or unclear speech. No attempt made to engage audience.</div>	No submission
Feedback: What was done well				Feedback: What you could improve				
Result for this Assessment Task:								