ECTE250 Deliverable 6 Guidelines



**ECTE250 Deliverable 6 Final Design Report**

The sixth deliverable of ECTE250 is the Final Design Report. The report must be submitted online on Spring-W10 by **Friday** 08:00 pm. The report must include the provided coversheet. Marks will be distributed using peer evaluation (PE) session which will close at **Saturday** 08:00 pm. The report is limited to 4000 words including tables and captions (exclude the table of contents, references and appendices). The report (MS Word document or PDF) must cover design, design calculations, a description of the breadboard and final built Arduino subsystem prototype, all testing procedures developed, results measured, discussion, any consequential changes to the originally designed circuitry/programming, description of any problems encountered, the individual solutions to those problems and who in the team was the original member who suggested the successful solution. This should include photos of the finished working prototype, the problems encountered and solved during session. The discussion should include an assessment of the results measured in final system against the original functional specifications.

*What to include in the report*

The report should include the following sections:

 Executive Summary.

 Team Roles. Describe the roles of each team member, their key achievements and key contribution to the report and to the project throughout the session (including fixed design roles, and rotating organizational roles).

 Introduction and overview of the product.

 Final design specifications, describing any changes from the original proposal.

 Details of how the construction of the product and any changes from the original implementation plan described in the previous in-session report.

 Final details of the testing of the prototype and quality control procedures adopted.

 A final report on the progress of the team against the original plan and budget. This should include an indication of the profitability of the team.

 Commercialization and marketing. This should include details on how the team will make money from the product (if relevant) and their confirmed marketing strategy for the

innovation fair.

The report should also contain at least four appendices (these are not included in word count, as is the title page and index):

 Appendix A. A copy of all the minutes of meetings for the entire Session.

 Appendix B: Schematics of the prototype circuits.

 Appendix C: Arduino source code.

 Appendix D: Detailed individual contribution.

 Other Appendices, as necessary.

**The contribution of each team member to the design and to the report should be clearly indicated in Appendix D.** There must be no copying from any source in any report. The members of the team must write all the words in any deliverable. ALL members of the team MUSTcontribute to the contents of the report.



*Marking Criteria*

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|  | **Very Poor** | **Poor** | **Average** | **Good** | **Very Good** |
| **Criteria** | **1** | **2** | **3** | **4** | **5** |
| **1. Structure:**  **Introduction, order of material, choice of**  **chapter headings**  Does the report use relevant and consistent headings, subheadings and numbering? | Not cohesive.  Headings, sub headings and numbering are missing, inconsistent, and/or irrelevant to the section content, or inappropriately worded). | Some sections not  integrated smoothly.  Headings, sub headings and numbering are not always consistent and information based on these is not always easy to locate. | Report information is  locatable through the use of appropriate and relevant  headings sub-headings and numbering. | The report is  cohesive.  Information easily locatable through the use of appropriate and relevant headings and numbering. | Meets all criteria for 4  and  Information is presented in a logical way and chapters are well integrated. |
| **2. Presentation:**  **Ease of reading, use of language, use of diagrams.**  Is the report fluent, legible and easy to read?  Does the report have the correct use of paragraphs?  Are all tables, figures and diagrams labelled?  Is spelling and sentence construction correct?  Is the language of the report appropriate for the intended  audience?  Are references appropriate and listed correctly, if relevant? | Paragraphs too long (too many  ideas, unrelated ideas) or too  short (ideas not adequately  explained or developed).  Tables, figures and diagrams are either missing or adequately used or labelled.  Spelling, grammar and punctuation errors make the report difficult to read.  Language is not appropriate for the intended audience. | Some paragraphs are not  well formed.  Tables, figures and diagrams are sometimes unlabelled, missing or in adequate to convey the required information.  Spelling, grammatical and punctuation errors sometimes make the report difficult to read.  Language is sometimes inappropriate for the intended audience. | Paragraphs are well formed.  All tables, figures and diagrams are labelled and adequately convey information.  Largely free from grammatical and spelling errors.  Language is appropriate for the intended audience. | Paragraphs are well  formed.  Tables, figures and diagrams are adequately labelled and smoothly integrated into the report.  Free from grammatical and spelling errors.  Language is appropriate for the intended audience. | Meets all criteria for 4  and  Tables, figures and diagrams are selectively used to precisely convey information.  Convincingly argues for one option over alternative options.  Uses a variety of appropriate evidence and argument to make and support convincing statements. |



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| **3. Content:**  **Final design specifications,**  **construction of the**  **prototype, prototype testing, quality control**  Are all required sections of the report included?  Was the content relevant and  interesting?  Are statements and technical details convincing (adequately explained, have some supporting evidence, and are logical)?  Are references appropriate and listed correctly? | A number of required  sections of the report are missing or inadequate.  Large sections of the content are irrelevant.  The majority of statements and technical details are not convincing or adequately explained.  Inappropriate references and evidence of plagiarism. | Some required sections of  the report are inadequate, missing or irrelevant.  Some statements and technical details are not convincing and lack supporting evidence (references or otherwise). | All required sections are  included  Most content is relevant. Most statements and technical details are convincing.  Some references are used to support statements, when appropriate. Citation system is correctly used most of the time. | All required sections  are included.  All Content is relevant. Convincing statements and technical details.  A wide range of scholarly references are used to support statements, when appropriate.  Citation system is consistently and correctly used. | Meets all criteria for 4  and  Tables, figures and diagrams are selectively used to precisely convey information.  Content is interesting as well as relevant.  References are used professionally (i.e. at a level expected of industry reports). |



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| **4. Progress and Marketing:**  **Progress of the project with**  **respect to the budget and project plan, commercialization and marketing**  Was progress satisfactory and is completion imminent?  Was the project within budget and could a profit be made?  Is there a clear commercialization  and marketing  strategy? | Project planning poor and budget details very simple or not present.  Commercialization and marketing strategy very limited or not included. | Project plan is too brief and not followed well.  Budget details are not justified or adequately explained.  Marketing and commercialization details limited. | Some indication of satisfactory progress.  Budget details include some explanation.  Marketing and commercialization rather generic. | Satisfactory progress with tasks and roles clearly explained.  Budget details are clearly explained and costings appear accurate and sensible.  Good commercialization and marketing strategy. | Meets all criteria for 4  and  Progress is above satisfactory and includes evidence of achievement.  A clear explanation of budget progress.  Significant thought given to the commercialization and marketing strategy. |

**Marking Guide:**

1. Very Poor: Most of the criteria are not met.

2. Poor: While most criteria are met, it is not of a satisfactory standard.

3. Average: All criteria are met to an acceptable level.

4. Good: All criteria are met and the report is of a good standard.

5. Very Good: All criteria are met and the report is of a very good standard