

University of Glasgow
James Watt School of Engineering
Fault Detection, Isolation & Recovery
Assignment Report Guidelines

Introduction

The report for the FDIR assignment constitutes 50% of the course grade and should follow the guidelines given below. These describe, in general terms, the format and length of the report. Although these provide a basic outline for the report, they should not be taken as a definitive list of everything that is required for your submission.

Length and Purpose of the Report

The main purpose of this report is to provide a detailed technical description of your FDIR assignment, the design of the FDIR systems for the application, the code developed, the result analysis and assessment of the performance of the FDIR system. It is not a lab record or construction diary. It is a clear and concise technical report. The maximum length of the report should be about 20-30 pages. The references and appendices are not included in the number of pages. Do not exceed this number of pages as you may be penalised.

Basic Structure

The basic structure of the report should have the following elements:

- *Abstract* – Brief summary of the report. Usually only half a page for a report of this type.
- *Introduction* – Outline of the assignment in your own words.
- *Methodology* – Description of the implementation aspects for each stage of the assignment e.g. simulation development, “open loop” FDIR development, closed loop FDIR development.
- *Results and Analysis* – Required results to illustrate the capability of your FDIR system and suitably technical analysis of these results e.g. simulation results for performance analysis.
- *Conclusions* – Findings from the design and implementation of your FDIR system and the analysis of the results.
- *References* – List of documents used in this assignment.
- *Appendices* – Additional material not needed in the main sections of the report e.g. Matlab/Simulink code.

Some additional elements/sections may be required (e.g. discussion of additional results or observations). The narrative should be clear and concise.

Captions and Labelling

All figures, tables and equations must be numbered in an appropriate manner. Figures and tables need to have a descriptive caption. Axes on graphs need to be labelled appropriately.

Presentation, Style and Structure

In addition to the marks awarded for completing the technical aspects of the assignment, marks are awarded to the presentation, writing style and structure of your report.

Report Submission

Your report should be in word or pdf format. It should be submitted through the moodle submission portal on the FDIR moodle page. The report should be submitted by 4:30pm on 19th April.

Assessment of Report

Your report will be marked using the marking scheme outlined below.

- *Writing Style* (5%) – Report writing style and provides a narrative flow that is easy to follow.
- *Presentation & Figures* (10%) – Clear and consistent presentation style. Figures are clearly labelled, captioned and presented so that in data/information can be understood.
- *Organisation & Structure* (5%) – Structure of the report is logical and all section are correctly placed.
- *Technical Content* (75%) – All aspects of the assignment are addressed. The methodology, results and analysis for each part of the assignment should be presented and discussed. Suitable conclusions should be drawn from the analysis and discussion.
- *References* (5%) – A suitable range of references should be cited to support the methodology, FDIR system design and any other relevant stage in the reporting process.

Please note the percentages represent the proportion of your mark for each assessment element and is provided for guidance.

Dr Euan McGookin
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