# **MS Thesis - I Final Report**

<*Enter your details below*>

Student Name:

ERP ID:

Title of Thesis:

Supervisor’s Name:

Signature of Supervisor:

Date:

Instructions:

* This final report for MS Thesis-I carries 60% weightage of your total MS Thesis I grade.
* You will submit the PDF of this report on LMS by the set deadline.
* Remember that the report must be signed by your supervisor. Otherwise, it will not be acceptable.
* The deadline will be announced by the MS coordinator. No late submissions are acceptable.
* Do not exceed the required length of each section (mentioned in the template below)
* On using images and tables from other sources, cite their source as well.
* The total length of this report should be a minimum of 15 pages and a maximum of 30+ pages.
* Explanatory notes have been added. You should remove them later.
* In this report, there are chapters. Each chapter should begin on a new page.
* Insert table of contents after you finish the report.

Chapter 1: Introduction [3-7 pages]

* *Introduce and describe your research domain – include figures and tables to facilitate understand as required*
* *Mention briefly the limitations of the current research domain* 
  + *Don’t quote all the papers*
  + *Mention only 2-3 papers*
  + *Focus on mentioning the core limitations – you don’t need to mention all limitations*
  + *All papers and all limitations are mentioned in Chapter 2*
* *Motivate your research (at least 5-6 sentences – this is the connecting part between the current problems and what you are trying to propose and do)*
* *Write your problem statement: this should be in Bold and highlighted. This is the problem you will be solving in your thesis*
* *Write your research questions*
  + *At least 1 question, and preferably 2-3*
  + *These are derived from the problem statement.*
  + *You must answer these research questions in your thesis.*

Chapter 2: State of the Art [5-15 pages]

* *Mention your review methodology and review type (systematic, narrative etc.)*
* *Draw a diagram of your methodology so it is easy to follow (if possible)*
* *Include papers from the last 10 or 5 years and show the publication rate per year in a graph*
* *Mention your online digital sources and your search queries*
* *If you filtered your results, inform about the filtration methodology*
* *Inform how many papers you extracted from which digital sources.*
* *Make a table of the important journals, conferences, symposiums and workshops in which your extracted papers have been published*
* *Mention separately the important research groups of your domain which you identified from your results*
* *Make a table (or tables) of the final set of extracted papers – the columns of this table should be selected by you and should reflect the research domain.*
* *By using this table, describe each paper separately (at least one paragraph per paper)*
* *Mention the limitations of each paper while describing this paper*
* *After finishing the above, summarize the limitations of each paper in a separate table.*
* *While describing this table, identify potential gaps which could be fulfilled to enhance the state of the art (you will address one of these gaps in your thesis)*
* *You have been asked to do the review in mid-term report as well – the review here needs to be more thorough and complete by all means*
* *If proper review and gaps are not identified, then the coordinator may reject the thesis.*

Chapter 3: Proposed Novel Methodology [4-10 pages]

* *Address the identified gap in the previous chapter to propose a new and robust methodology to overcome this gap.*
* *The methodology can be a new algorithm, technology, design etc. You must prove that your idea is novel*
* *Draw a detailed diagram or present pseudocode of your proposed idea – the diagram should follow standard design principles.*
* *The diagram can also be a flowchart or any other illustration that describes your idea thoroughly.*
* *Mention any background knowledge as well that is required to understand your novel idea.*

Chapter 4: Proposed Experimental Methodology and Results

* *You need to test your proposed idea in a preliminary experiment. This is just to do an initial test of your idea*
* *The results of this experiment may nor may not go in your favor – it does not matter at this stage.*
* *Mention your initial experimental methodology.*
* *Then, mention the results. Remember that the results should attempt to answer one or more of your research questions.*
* *Discuss the positives and negatives of your results.*

Chapter 5: Research Plan for Thesis-II

* *Mention your research plan for Thesis-II – could possibly include proposed changes in your design, improved experimental methodology, a repeat of literature review if required.*
* *In the research plan, mention your outputs over the four months of the Thesis-II semester as follows: (you can also draw a diagram)*
  + *Month 1 deliverable:*
  + *Month 2 deliverable:*
  + *Month 3 deliverable:*
  + *Month 4 deliverable:*

References (make a bulleted list):

Ali, U., Mahmood, T., 2024. International Journal of Machine Learning and Cybernetics 16, 397–418.

Humayun, S., Mahmood, T., 2025. Artificial Intelligence in Health 0, 4197.

Murad, N.Y., Mahmood, T., Forkan, A.R.M., Morshed, A., Jayaraman, P.P., Siddiqui, M.S., 2023. Sensors 23, 3670.

*Some facts:*

* *Use Harvard reference style as above*
* *Use Mendeley (Mendeley Cite for Word) to manage references (as done above)–* 
  + *First download Mendeley reference manager and Mendeley cite plugin*
  + *Open manager and create a new collection*
  + *Add your articles to this collection (which you want to cite in this report) – you can add Bibtex entries, PDFs etc. related to your article.*
  + *In References tab, open Mendeley Cite – your collection will appear*
  + *In Citation settings, set the referencing style as Elsevier Harvard (without titles)*
  + *Add articles from the collection into your document wherever you want*
  + *When you have finished, then click the three-dots in Mendeley Cite and Insert Bibliography at the end of the document (like above)*