

ELG4157: Technical Paper Writing Guidelines

A technical research paper is a formal report designed to convey technical information in a clear and easily accessible format. It is divided into sections which allow different readers to access different levels of information.

Title Page	The title should reflect the details of the work. Try to describe the content of a paper using the fewest possible words.
Abstract	Summarize the whole work in three to four statements including important features, results and conclusions. This is a “stand alone” condensed version of the paper. It covers: significance, methodology, and findings of the work.
Keywords	Include few words (about 5) that best reflect the content of the research. These are usually for enhanced search engine optimization.
Introduction	State the objectives of the paper and comment on the way the topic of the work is to be treated. This section should include a literature review of at least 5 research papers, preferably published in IEEE Transactions. These papers should be cited properly in the reference section. The introduction should not be too broad or vague, more than 2 pages, or an aggregation of disconnected summaries of past works.
Methodology, Results, and Discussion	These can come under one main section which may be divided into numbered and headed sections. These sub-sections separate the different main ideas in a logical order. Use illustrations to clarify ideas, support results with figures, tables, and/or graphs. Try to demonstrate that you solved the problem or made advances even if small.
Conclusion	A short, logical summing up of the theme(s) developed in the main text. Revisit the key points in each section. Include a summary of the main findings, important conclusions and implications for the field. Suggest future areas for research. Try to not repeat the abstract.
References	Details of published sources of material referred to or quoted in the text (including any lecture notes and URL addresses of any websites used).
Acknowledgment	List of people who helped you research or prepare the report, if any including your TAs, for example.

Please follow the IEEE format: An IEEE Transactions paper could be a good example to learn from.