

## Mechanical Engineering – Engineering Project Reports

This report format emphasizes communication of the design process results. The purpose of the project, current “state of affairs” relating to the project, goals and objectives of the project, criteria to define the project, evaluation of alternatives, testing and analysis, and decisions and conclusions must be clearly explained. The following format should be followed, use of headings is generally required.

### **Letter of Transmittal\*** (one page maximum)

Objective (purpose), procedures, results and conclusions  
Proper letter format (addressed, courteous closing, signed, etc.)

### **Title Page, Table of Contents\*, Lists of Figures and Tables\***

All properly done with complete information

### **Executive Summary\*** (half page maximum: objective, procedures, results, conclusions)

### **Introduction** (objective/purpose and summary of the report)

### **Background** (what is currently understood – state of the art, what is the context for this project, etc.)

### **Discussion:**

Clear problem definition and objectives and/or design criteria  
Thorough evaluation of alternatives  
Proper analysis and/or testing  
Decisions explained well  
Design or test details explained well

### **Tables and Figures** (tables and figures should be embedded in appropriate sections such as background and discussion).

All figures and tables discussed in text, but are self explanatory  
Numbered and properly titled, contain units, axis labels  
Referenced (if information not created by authors)  
Appropriate and adequate to communicate effectively

### **Conclusions and Recommendations**

Conclusions (were objectives met? Briefly explain.)  
Recommendations for future work

### **References**

Appropriate quantity and quality  
Proper citation within report and proper reference section format

### **Appendices** (may include schedule, budget, meeting minutes, calculations, analysis, test data, vendor information, etc.)

### **Writing Quality**

Format: proper use of headings, page numbers, etc.  
Writing: clear, complete, and concise with proper mechanics (spelling, punctuation, grammar, and paragraph and sentence structures)  
Proper tense, third person, passive voice, formal writing

\*Short or informal reports omit letter of transmittal, table of contents, executive summary, and lists of tables and figures. Refer to the UP School of Engineering’s *Writing for Engineers* handbook for assistance.

\*All elements required for ME481/482 project reports.