

معهد المستقبل العالي للهندسة بالفيوم
FUTURE HIGH INSTITUTE OF ENGINEERING
IN FAYOUM



TECHNICAL WRITING

By Dr. Abeer Mohamed Hassan

2024-2025

BASIC COURSE INFORMATION

Course Code: GEN411

Course Name: Technical Writing

Course Credit: 2 hrs.

Instructor: Dr. Abeer Mohamed

Teaching Assistant: Yourself

Lecture 1

INTRODUCTION



TECHNICAL REPORT WRITING

- What is Technical Report?
- Why Using Technical Report?
- How writing Technical Report?

The background of the slide features a vibrant sunset scene with several palm trees silhouetted against a sky transitioning from bright yellow at the top to deep blue at the bottom. The slide is framed by a multi-colored border in shades of purple, blue, and green.

WHAT IS TECHNICAL REPORT?

WHAT IS TECHNICAL REPORT?

- A specialized, structured form of writing that presents technical information to readers in such way that it:
 - is adapted to their needs and understanding level.
 - helps to perform a specific task or solve a specific problem.
- Technical Report communicates technical information, facts, and conclusions.
- It is mostly written by engineers.

The background of the slide features a vibrant sunset or sunrise scene. The sky transitions from a bright yellow at the top to a deep orange and then to a soft purple and blue at the bottom. Silhouetted against this colorful sky are several tall palm trees of varying heights. The overall mood is serene and tropical.

WHY IS TECHNICAL REPORT?

WHY IS TECHNICAL REPORT?

- Technical reports are often **prepared for sponsors of research projects.**
- Technical reports are today **a major source of scientific and technical information.**
- They are prepared for **internal and wider distribution by many organizations.**
- There are no absolute rules about the details of the report, because **every report must be totally adapted to the needs of its audience (readers).**
- Flexibility and adaptation may be useful, but only **to make the report more accessible to the reader.**

WHY IS TECHNICAL REPORT?

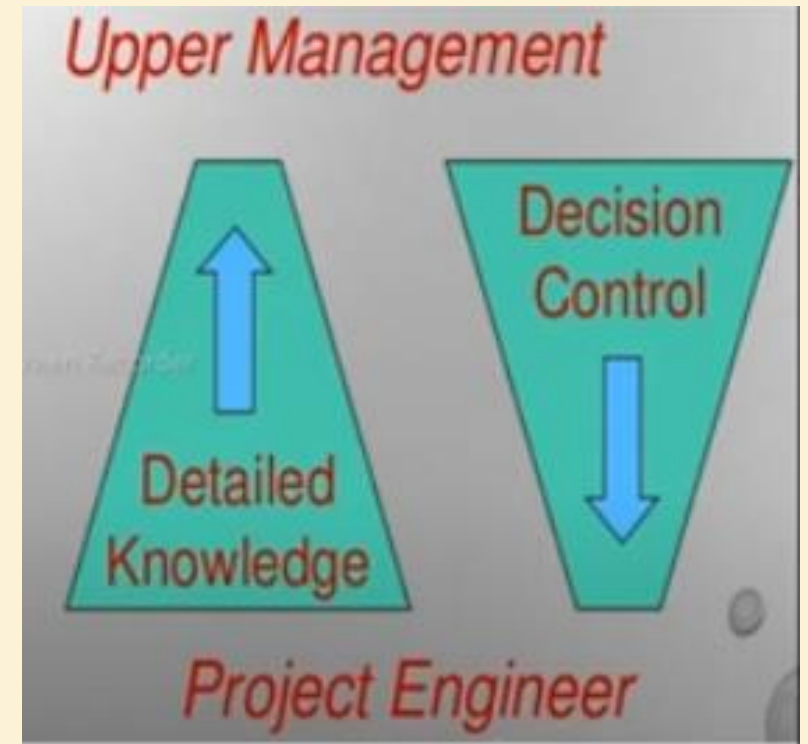
- A graduation project is not accompanied with a software, then the documentation would be the evidence of the project.
- Good project work could be ruined by a poor report.

CHARACTERISTICS OF TECHNICAL REPORT?

- **Clarity:** easily understood by intended audience.
- **Conciseness:** clear without excess verbiage.
- **Specific Audience:** targeted to particular readers.
- **Specific Purpose:** written for a specific purpose.
- **Accuracy:** is factual, correct, and free from bias.
- **Correctness:** follows grammatical and technical conventions.
- **Comprehensiveness:** contains all necessary information.
- **Accessibility:** includes table of contents, headings, subheadings, indexes.

IMPORTANCE OF TECHNICAL WRITING

- Engineers perform technical writing to communicate pertinent information that is needed by upper management to make intelligent decision that will affect the company's future.
- Many engineers spend between 1/3 to 1/2 of their work time engaged in Technical Writing.
- In academia, technical reports are crucial for documenting research findings, graduation projects, and case studies. These reports contribute to the body of knowledge and are often the foundation for further research or development.



BASIC PRINCIPLES OF TECHNICAL WRITING

What are the basic principles of good technical writing ?

- The writer of a report must have a specific reader or group of readers.
 - 1- Your readers are busy and impatient.
- He must decide what the specific purpose of his report is and make sure that every part of his report contributes to that purpose.
 - 2- Never assume read whole paper from start to end.

TYPES OF TECHNICAL WRITING

- Technical Proposals.
- Regulations.
- Manuals.
- Standard Operating Procedures.
- Requests.
- **Technical Reports.**
- Progress Reports.
- Letters, Memos, Emails.

LAYOUT & DESIGN

1. Front Cover

2. Title Page

3. Abstract

4. Table of Content

5. List of Tables and Figures

6. Introduction

7. Methods, Assumption, and Procedures

8. Results and Discussion

9. Conclusion

10. References

11. Appendices

12. List of Symbols, Abbreviations, and Acronyms

13. Back Cover

THANK YOU