Georgia Tech College of Engineering
George W. Woodruff School of Mechanical Engineering

BURDELL INC.

ANALYTICAL DIVISION EMPLOYEE WRITING GUIDE

Spring 2026

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STYLE GUIDE

The purpose of the style guide is twofold: first, to maintain a professional standard and ensure consistency across all external Burdell, Inc. communications; and second, to understand how communication standards influence the use value of technical information.

Standardization in a professional setting like Burdell, Inc. is crucial for several reasons.

- It ensures a cohesive and professional image, presenting a unified front to external clients and stakeholders, and reduces the cognitive load for returning clients.
- It streamlines communication processes, reducing the risk of misunderstandings and enhancing efficiency.
- It establishes a foundation for quality control, enabling the company to consistently deliver high standards of work.

This guide is not a checklist. It is a decision-support tool. Engineers at Burdell are expected to interpret guidance based on audience, purpose, and risk. In this guide, Examples illustrate principles, not templates to replicate verbatim.

QUICK FACTS

Max Length
ME 3057: 2000 Words
(Including Required Cover Page, Figure Text, Everything)

ME 3058: 3000 Words
(Including Required Cover Page, Figure Text, Everything)

File Naming Format
Course#_Description_Type_Section#Block#Team#_Date_Rev
EX. ME3057_SONAR_Report_A01B2T1_09232024_3.pdf

File Type
PDF

Font
Roboto, 11
(Available for free from Google Fonts: Download Roboto)

Alignment
Left-Aligned
(Use at all times--*e.g., in tables, etc.*--because other alignments impair accessibility; the only exception is for equations which should be centered with right-aligned numbering.)

Headers
Left-Aligned, Roboto Bold, 12

Sub-Headers
Left-Aligned, Indented 0.5", Roboto Italic, 12

Page Numbers
Bottom-Right Corner, Roboto 11, #/# format (ex. 2/5)

Margins
1" Top, Bottom, Left, and Right

New Paragraph Signaling
White Space, No Indenting

Spacing
Single spacing

OUR CLIENT, JULIE CHANG

Title: Director of Product (External Client)

Level of education: Bachelors (IE) and MBA

Challenges:

- Time Constraints
- Balancing Multiple Responsibilities
- Explaining Delays and Costs
- Communication Between Technical and Non-Technical Teams

Julie as a Report User/Reader

As the Director of Product at Webb Industries, Julie reports to the Head of Product (VP), a senior manager in strategy and investment, but also supports her product teams, including technical teams in charge of any needed redesigns or modifications. Hard deadlines, cost management, and ensuring products meet customer and design goals are her daily concerns. She's juggling multiple tasks and is perpetually seeking practical solutions, but she thrives on providing technical solutions to customers. She enjoys being part of the business world, rubbing shoulders with upper management, and sees herself as the bridge between technical capabilities and the company's strategic leaders. She believes that consistently delivering products on time, under cost, and meeting goals will lead to better opportunities in her career.

Julie's workdays are long, crammed with activities and meetings. She dedicates around 60 hours a week to work. Her job involves managing many moving parts, working with numerous teams simultaneously, and bridging the gap between technical teams and the overarching business objectives. Therefore, she values concise, actionable content that can be readily reused for her needs.

Julie manages multiple product teams and a wide portfolio of projects, so she doesn't have time to dive into the technical details of each individual product. She is knowledgeable about each product in her portfolio, including technical capabilities, but depends on her product engineers to make any design modifications. Julie's main frustrations revolve around engineers taking too long, overspending, and not appreciating her needs. Her role entails explaining to her supervisors why overspending or time delays happen, which adds to her workload. She hasn't been directly involved in technical design for a while and no longer cares about the same details of technical production engineers do.

Julie values her time and the company's money; she demands clear, precise answers. She typically wants to know if a solution is worth her time, if it meets her requirements, if it solves her problems, and if she can present it effectively to her superiors.

CLIENTS EXPECT ACTIONABILITY

Burdell, Inc. clients expect to be able to quickly and confidently take action after employing our firm to investigate a tool, process, or system. Therefore, our communications to clients must enable this confident action through its technical accuracy and communicative clarity. Consider how the following standards support actionability.

Communication Format:

Accessible Structure:

- Values documents with an accessible structure, allowing Julie to quickly locate key information without extensive effort.

Communication Style:

Actionable Language:

- Expects communications to use language that is actionable, providing clear instructions or steps for any required actions.

Communication Content:

Ready-to-Use Insights:

- Expects insights and recommendations to be presented in a way that requires minimal additional analysis, providing ready-to-use information.

Practical Recommendations:

- Values practical and implementable recommendations/options that align with the client's goals.

HOW JULIE WILL SCAN/READ YOUR REPORTS

"How Julie reads" is not a personality trait; it's a function of decision type. In professional practice, report readers often behave as follows:

- Component validation → skim for confirmation
- Exploratory systems work → interrogate methods
- Design justification → trace reasoning and tradeoffs

In the Technical Labs Sequence, You'll Consider:

- Component testing report:
  - "Does this component meet requirements under the tested conditions?"
- Exploratory systems report:
  - "Can I trust the modeling/experimental approach enough to act on these findings?"

The way Julie reads a report depends on the kind of decision she is being asked to make, i.e., these differences reflect professional genre expectations, not changing standards.

Regardless of type, reports must be actionable. In exploratory systems reports, uncertainty is expected—but indecision is not actionable. Statements such as "this could be X or might be Y" narrow possibilities but do not enable the client to act. While such hedging may feel appropriate when knowledge is incomplete, it often leaves the client without a clear next step. Instead, effective exploratory conclusions:

- Recommend a specific course of action, or
- Recommend additional investigation, clearly justified by what remains uncertain and why it matters

A useful recommendation must be falsifiable: it should be possible for it to be wrong. If a statement cannot be wrong, it cannot meaningfully guide action. (See "Actionable Writing & Topic Sentences" for an example.)

Below shows how Julie's reading priorities shift. As you review them, pay attention not just to what Julie reads first, but why certain sections carry more or less weight in each context.

COMPONENT TESTING / VALIDATION REPORTS (3057)

Does this component meet requirements under the tested conditions?

Julie is primarily concerned with confirmation and reliability. She expects the report to clearly state whether a component meets specifications, under what conditions, and with what level of confidence.

1. Title and Recommendations
- She will first look at the title and recommendations from the introduction. These should be clear, concise, and directly related to her options for the product.

2. Headings and Topic Sentences
- She will scan the headings, subheadings, and topic sentences to understand the report's key points and structure.

3. Visuals and Key Data Points
- She will glance at visual elements such as charts, graphs, and tables. These are scanned to quickly absorb critical data or trends. Well-labeled visuals that are easy to interpret can make a big impression, so clarity and relevance here are essential.

4. Introduction
- When she has more time she will return to the introduction to understand the context or problem the report addresses. This should clearly show how Burdell set their scope for this project.

5. Results and Detailed Data Points
- After a high-level scan, she will look for specific details you claim indicate success, failure, or trends relevant to the decisions she needs to make about the product. This is where clear, well-explained/analyzed data becomes crucial.

6. Conclusions and Moving Forward
- She will read the conclusions and implementation recommendations to understand actionable takeaways and how these affect future decisions.

7. Methods will be consulted if results seem off or are undesirable.

EXPLORATORY SYSTEMS / MODELING REPORTS (3058)

Can I trust the modeling or experimental approach enough to act on these findings?

Julie is operating under greater uncertainty. She expects the report to help her judge whether the approach, assumptions, and methods are credible enough to inform future decisions.

1. Title and Framing of Recommendations
- She will read these as provisional: *What system behavior is being explored; What insights are being proposed; How confident she should be in acting on them?*

2. Headings and Topic Sentences
- She will scan headings and topic sentences to assess: *How the system was conceptualized; What assumptions or simplifications were made; How the investigation was structured?* At this stage, she is already evaluating whether the logic of the approach makes sense.

3. Visuals and Key Data Points
- She will examine visuals not just for trends, but for evidence that the model or system behaves as expected, sensitivity to key parameters, and indicators of robustness or instability. Well-designed visuals help her judge whether results are meaningful or potentially misleading.

4. Methodology
- Reading carefully, she is looking for justification of modeling or experimental choices, clear explanation of assumptions and constraints, and evidence that alternatives were considered. Insufficient justification undermines all downstream results.

5. Results and Interpretation
- She will read results alongside interpretation to determine: *What the results suggest about system behavior; How sensitive conclusions are to assumptions or inputs; Where uncertainty limits confidence?*

6. Conclusions and Moving Forward
- She will read conclusions to understand: *What insights are sufficiently supported; What questions remain open; What additional analysis, testing, or refinement is recommended?*

REPORT SECTIONS

In the Analytical Division at Burdell, Inc. we use standardized report sections to streamline our presentation of findings. Below are the section expectations for experimental reports.

INTRODUCTION

- Provide a brief overview of the situation or problem that necessitated the recommendation.
- Clearly outline the scope of the report and the specific objectives it aims to achieve.
- Provide the client with the recommendation they solicited. Immediately follow it with a rationale that lists the primary reasons that support the recommendation.

Engineers don't just follow instructions—they interpret and make judgment calls based on client expectations. To discuss your methods, you must know why you are doing what you are doing. This is why it is crucial to ask questions when reading the TPS in Perusall.

METHODS/METHODOLOGY

- See the next page for an explanation of the different expectations between a methods section and a methodology section and how they correspond to each course in the lab sequence.

RESULTS & DISCUSSION

- Organize into subsections that focus on your main reasons that support your overall recommendation as well as other findings specifically requested by the client.
- Include quantitative data to support your claims. Use some *appropriate* qualitative language to provide framing or scale. All data should be explained in a way that demonstrates how such data support your reasons and overall recommendation.
- All data and its analysis should be explained in a way that demonstrates how your interpretation supports your reasons and overall recommendation.

CONCLUSION

- Clarify how the reasons discussed in the previous section collectively support your recommendation.
- Clarify how yours is the best recommendation given the situation.
- Clarify how the recommendation is actionable.

METHODS VS. METHODOLOGY: HOW EXPECTATIONS DIFFER ACROSS 3057 AND 3058

Although both 3057 and 3058 use the same core report sections, the purpose and structure of Methods/Methodology differ between the two courses.

Why the Two Courses Require Different Sections

3057 Experiments Are Routine and Well-Defined Through Detailed TPSs
In ME 3057, you conduct common, industry-standard experiments; these tests reflect routine work. Because these tests follow established procedures, Julie does not expect you to argue for your approach. Therefore, write a **Methods** section that explain what was measured, how you measured it, and why measurement setup was appropriate for her needs. Julie's team should be able to rebuild the experiment with their own equipment in-house. This is not the same as:

- "We used the Instron 5865 and ran at 10 mm/min,"

nor is it

- "Step 1… Step 2… Step 3…"

It's much closer to: "We measured X using a transducer capable of ±Y precision, which is within the threshold needed to detect the client's required Z-level changes."

3058 Experiments Are Exploratory and Justified Through Engineering Judgment
In ME 3058, experiments do not follow predetermined procedures. Your team must determine how to investigate the problem, and Julie needs visibility into your reasoning. In exploratory contexts, the quality of the approach—not just the data—affects whether a conclusion can be trusted. Therefore, 3058 requires a **Methodology** section that:

- Explains what the team needed to understand
- Argues for the chosen investigative approach
- Describes relevant constraints and tradeoffs
- Shows how your method influences interpretation

Julie's ability to act on your recommendation depends on understanding why your approach is sound.

ME 3057 — METHODS

In addition to explaining how the overall set-up is appropriate for Julie's needs and scope, use the following sub-sections.

Data Collection

- What was measured
- How the sensing/measurement setup worked and why this was appropriate
- Relevant sensitivities, uncertainties, and constraints

Data Analysis

- How raw data was processed
- How uncertainty or precision was determined
- Any transformations that prepare results for interpretation

This structure reflects industry expectations for routine testing: concise, reusable, and easy for Julie to scan.

ME 3058 — METHODOLOGY

Your Methodology is an argument, not a procedure. A methodology section begins with a topic sentence that states why the chosen approach is appropriate given the client's needs and the experimental constraints. From there, describe the key choices you made, the tradeoffs involved, and how these decisions shaped the quality and limits of the results.

Because 3058 experiments are exploratory, there are no pre-set sub-sections. Instead, the Methodology should:

- Make the team's engineering reasoning visible
- Justify the chosen investigative approach
- Address constraints, alternatives, and implications
- Explain how the method supports decision-making

CHOOSING AN ARGUMENT STRUCTURE: DIRECT OR INDIRECT STYLE

Effective technical communication means choosing when to introduce a claim based on the **audience**, **purpose**, and **risk of the decision being supported**. There are two common and legitimate argument structures; neither is inherently better; each is effective when used in the appropriate context. Engineers are expected to adapt argument structure to context. Inconsistent expectations across documents often reflect different expectations or uses across professional genres.

DIRECT ARGUMENT: FRONT-LOADED CLAIM/ DECISION-ORIENTED REPORTS

Typical structure:
Claim → Conditions/Assumptions → Evidence → Implications

When this structure is effective:

- The reader needs to quickly assess relevance or impact.
- The decision being supported carries limited or bounded risk.
- The report supports analysis, testing, or validation.
- The audience is time-constrained (e.g., managers, clients, teams).

Why engineers use it; front-loading the claim allows readers to immediately understand:

- What conclusion the engineer reached.
- Whether the report applies to their needs.
- Where to focus their attention in the evidence.

This structure increases efficiency and reduces the risk that key conclusions are missed.

Common pitfalls:

- Making a claim that is too broad or insufficiently qualified.
- Failing to clearly state assumptions or constraints.
- Treating evidence as a formality rather than justification.

INDIRECT ARGUMENT: EVIDENCE-LED/ DESIGN JUSTIFICATION REPORTS

Typical structure:
Context → Methods → Results → Interpreted Claim

When this structure is effective:

- The reader is technically expert and skeptical.
- The decision being supported carries elevated uncertainty, visibility, or risk.
- The report justifies a design choice among alternatives.
- Credibility depends on demonstrating process rigor.

Why engineers use it; in complex or uncertain design situations, readers may need to:

- Evaluate the validity of the approach.
- Examine tradeoffs and constraints.
- Assess results before accepting a conclusion.

Delaying the claim allows the engineer to build confidence before asking the reader to agree. **Even in evidence-led arguments, the final claim should be explicit, not left for the reader to guess.**

Common pitfalls:

- Burying the conclusion so deeply that its significance is unclear.
- Over-reporting results without interpretation.
- Assuming the reader will infer the claim without explicit guidance.

When deciding which structure to use, ask yourself the following questions:

Reader needs

- Does my reader need to decide quickly whether this report matters?
- Does my reader need to be convinced that my process justifies my conclusion?

Risk and consequences

- What is the cost of misunderstanding or premature agreement?
  - Higher risk generally favors delayed claims.

Genre simulation

- What genre does this document simulate?
  - Analysis reports and test summaries often differ from design justification reports.

REPORT COVER PAGE

Use the template below to create cover page consistency and ensure all required information is included.

The title of the report should be specific and usable: the client should instantly know the answer to her main question.

REPORT TITLE: SIGNALS IF FINDINGS INDICATE A GO OR NO GO FOR WHAT THE CLIENT WANTS TO DO

Include all of the names of the members of your team; order does not matter.

AUTHORS
FIRST LAST
FIRST LAST
FIRST LAST

This is for a report written for Julie Chang, our client, who works for Webb Industries. No need to change this; it's just standard practice.

RECIPIENT
WEBB INDUSTRIES
ATTN: JULIE CHANG

Include date of submission.

DATE
DECEMBER 9, 2024

Include your class and section number.

CLASS & SECTION
ME 3057, A03

Include the main lecture instructors here.

SUPERVISORS
JACOB BLEVINS
DAVID MACNAIR
JILL FENNELL

Include your specific GTAs here.

- GTA NAME
- GTA NAME

BURDELL, INC.
ANALYTICAL DIVISION

LINKS TO TEMPLATE:
(CANVA) (WORD)

THE LABS SEQUENCE USES DIRECT ARGUMENT STRUCTURE

Your job is to persuade decision-makers that our firm's recommendations are trustworthy and actionable. This requires:

1. **A Main Claim:** Reports have a central thesis or main claim, stating a particular point of view or recommendation.
2. **Reasons:** Supporting the main claim are specific reasons or sub-claims that provide the logical basis for the argument. Each reason contributes to the overall persuasiveness.
3. **Evidence:** To strengthen the reasons, reports must include valid and relevant evidence. This can be in the form of data, statistics, expert opinions, case studies, or other supporting information.

COMMON WRITING STRUCTURE FOR DIRECT ARGUMENTS

Thesis is the main claim of the writing with its supporting reasons (2-4).

- X is recommended because 1 and 2.

Paragraph/sub-section 1 would be devoted to arguing for reason 1.
Paragraph/sub-section 2 would be devoted to arguing for reason 2.

Each paragraph is expected to have a topic sentence, evidence, and commentary. The expected structure is as follows:

- Topic Sentence - Reason 1 is acceptable because of generalized (qualitatively stated) evidence.
- Evidence - Quantitively stated technical evidence that supports reason 1.
- Commentary - Your analysis of the evidence that explains exactly how the given evidence supports reason 1.
- Commentary - Repeat as much as needed (generally twice as long as stating the evidence).
- More Evidence - Most reasons selected for reports have more than one piece of evidence; give another.
- Commentary - Analyze your evidence to support your reasons.
- Commentary - Clarify your analysis so that it cannot be misunderstood.
- Take Away - Clarify how both pieces of evidence demonstrate reason 1 and therefore support your thesis (main claim).

ENGINEERING EXAMPLE W/ COMMON PARAGRAPH STRUCTURE

Topic Sentence	The results obtained from climbing sling tensile tests show that the hardware confidently reports forces and displacements within the client requested 10% threshold for this item. Figure 5 shows the force-displacement relation for the sling with the marked locations being the most relevant for analysis as these are the ultimate force and failure points for the component (F = 31.83 kN and D = 39 mm). Calculating the force uncertainty of the rig is done through taking the measurement uncertainty of the system (F = 313.9 N) and dividing it by this critical value giving a measurement uncertainty of 0.98%. Therefore, it can be stated that the climbing sling's ultimate force is 31.83 kN. Repeating the calculations with the respective failure point and displacement uncertainty (D = 0.52 mm) yields 1.4% uncertainty. Therefore, it can be stated that the climbing sling's maximum elongation prior to failure is 39 mm. Hence, it is safe to say that if the proper uncertainty reduction procedures are followed, Webb Inc. is safe to test climbing slings on this test rig.
Evidence	
Commentary	
Commentary	
Evidence	
Commentary	
Commentary	
Take Away	

COMMON WRITING STRUCTURE DISCLAIMER

In some cases, deviating from a standard may be appropriate if it improves clarity or usability for the client. Engineers are responsible for making and justifying these choices.

ACTIONABLE WRITING & TOPIC SENTENCES

The first sentence of the paragraph should be actionable for the audience. It needs to let them know what the data and analysis in this paragraph actually matters. As an engineer, it's your job to interpret findings and inform and guide. decision-makers

Topic sentences are the first sentence of their paragraphs; the purpose of the sentence is to clarify what the purpose of the paragraph is; what the main point the paragraph presents and how it relates to the report's goals.

Common issues with topic sentences include the ones that set the paragraph up for:

✗ **Hedging**
- "Changing the size of the cooling fans on the heat exchanger might result in improved heat dissipation."

✗ **Vagueness**
- "From observation in Figure 1, it is apparent that the volume is important. "

✗ **Listing**
- "This section will provide the choice of materials for the construction of the bridge."
- "The data was segmented by temperature. "
- "The target distance was calculated for each trial."
- "The result from experiment 1 was 5/5 mV."

Instead, **topic sentences should set the paragraph up to argue, explain, or justify throughout the rest of the paragraph.**

✓ **Claims that Need to be Argued**
- "The implementation of advanced predictive maintenance techniques significantly reduce downtime and maintenance costs in manufacturing facilities."

✓ **Claims that Need Explanation**
- "Using a magnetic stirrer with variable speed settings improve the accuracy and efficiency of chemical reactions. "

✓ **Claims that Need Justification**
- "Replacing traditional steel bolts with high-strength composite fasteners lead to weight reduction in automotive applications."

Topic sentences demystify the point for readers, making writer's recommendations and reasons seem more intuitive. Effective topic sentences decrease the audience's cognitive load because they clarify what they main point is.

Non-Actionable Topic Sentences for Julie Chang
"The aluminum dog bone was tested, and measurements were taken from unloaded to failure, with the force-displacement curve shown in Figure 7."
"The statistical model developed can be seen in Figure 2."
"As shown in Figure 4, rig deformation must be accounted for."

Even in complicated contexts, engineers must turn uncertainty into direction.

- **Less actionable:** "The behavior could be due to thermal effects or control instability."
- **More actionable:** "Because the observed response is most sensitive to temperature variation, we recommend targeted thermal characterization before refining the control model."

QUALITATIVE & QUANTITATIVE ARGUMENTATION

Both qualitative and quantitative argumentation are appropriate in engineering communications. Often communications need a mix of both.

QUALITATIVE	QUANTITATIVE	MIXED
Interpretation-based, descriptive, or relating to language.	Numbers-based, countable, or measurable.	Numbers or measurable data with contextual, qualitative words.
Simplifies complex concepts with context.	Offers precision, clarity, and demonstrates technical acumen.	Both; but longer and may add unnecessary/inappropriate content.
"The voltage across the Wheatstone bridge is small."	"The voltage across the Wheatstone bridge is 0.007 mV."	"The voltage across the Wheatstone bridge was determined to be insignificant because the mean averaged 0.007mV."

- Qualitative phrasing helps us understand values in relationship to other things, but in an imprecise way.
- Quantitative phrasing gives us a high-level of precision.

Often, both are needed so that the measurable data can be categorized and understood in the audience's mind.

Often qualitative phrasing is used first and then clarified with quantitative data. For example, a **topic sentence might use qualitative phrasing** to give context to a finding that will be quantified in the following sentences.

Some qualitative language is never appropriate or very risky in engineering reports, such as: "extensive testing," "detailed evaluation," "optimal," and more.

The key here is to balance actionability and trustworthiness: use qualitative phrasing that is useful for the reader and include quantitative engineering metrics to support your claims.

FORMATTING DEMONSTRATION & EXPECTED CONTENT

Results and Discussion (Heading)

Never jump into a sub-heading directly after listing a new heading. Readers are more likely to comprehend and retain information when they have a clear understanding of the section's context. It allows them to quickly grasp the main points of the section without delving into the details, enhancing the document's usability while creating section cohesiveness.

Sub-Heading

Figures must be integrated into the text near where they are most applicable. Additionally, figures should be explicitly referred to. For example, "The amplifier has a linear gain of of 15.70 V/V between 0.357 V and 1.875 V., as shown in Figure 2." Reference to figures should occur in the middle of the paragraph because such references need their significance contextualized before introduction, and they need the usability of their data explained afterword. Maintain a margin of at least 0.5 inches (1.27 cm) on all sides of your figures (including titles).

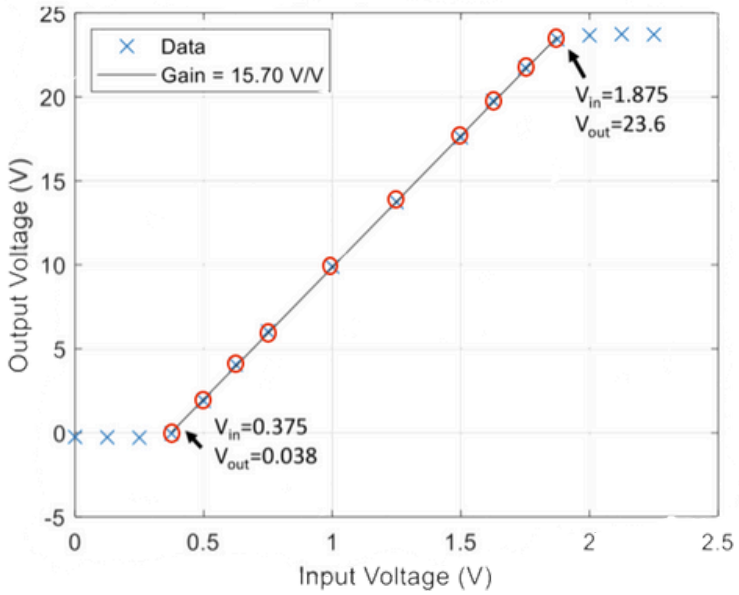


Figure 2: Block 1 amplifier linear gain with input settings of 0.357 V and 1.875 V.

Sub-Heading

At Burdell, Inc., we don't indent for new paragraphs, instead, new paragraphs are designated by being preceded with whitespace. While headings and sub-headings play a crucial role in organizing and structuring a document, they don't replace the need for effective topic sentences within the paragraphs. Specifically, headings and sub-headings contribute to the document's cohesion by indicating transitions between major sections, and topic sentences foster cohesion within paragraphs, establishing connections between sentences and ideas.

Conclusion

Conclusions should never present new or isolated information, summarize a theory, or propose any unsupported guess or hypothesis. Instead, you should:

- show the cohesiveness of your well-reasoned explanation for observed effects,
- clarify important interactions between system components, and/or
- explain observation of abnormal behavior that occurs outside of prediction.

The conclusion is the place to finalize your synthesis of observation with theory to explain, verify, or reject hypotheses about system operation and effects of components.

ORGANIZATION

Novice writers tend to report chronologically.

Effective writers structure and organize information in a way that enables the audience to grasp it as effortlessly as possible while aligning with our communication goals.

	Strategy	Data Arrangement	Application
✗	Chronological	Arrange information in time sequence to show development over time.	Helps show chronological relationships or processes.
✓	Topic/ Function	Arrange information by expected categories.	Works well for established categories for recurring reports.
✓	Compare/ Contrast	Show alternative information to note how they are similar and different.	Helps compare alternate options.
✓	Importance	Arrange information in order of priority.	Helps clarify needs and create a sense of priority.
✓	Simple/ Complex	Arrange from simplest to more complex information.	Helps build readers' knowledge incrementally to reduce cognitive load.
✓	Best/Worst Case	Arrange information from best to worse possible scenarios.	Helps add urgency and direction to an argument, especially when the audience is uninformed.

AVOID CHRONOLOGICAL

The last thing we want to do is make the reader follow along our process if our process isn't what they care about. Therefore, if you find yourself using the following words, you should reconsider what is usable about the information you are presenting to the audience:

- First
- Initially
- Next
- Then
- Afterward
- Subsequently
- Following
- Later
- Simultaneously
- Currently
- In the meantime
- In the interim
- During
- Prior to
- Before
- Preceding

USE REASON-BASED

Design the audience's information experience by using an organizational strategy that will enhance the audience's understanding of how the information is best understood for their decision-making process.

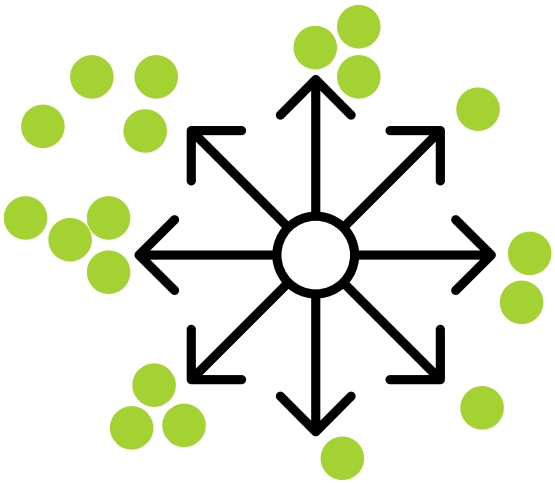
While the report genre has expected sections that need to occur in an expected order, the information within those sections still needs to be organized purposefully. For experimental reports, you'll likely find **importance** and **simple to complex** to be your best organizational options.

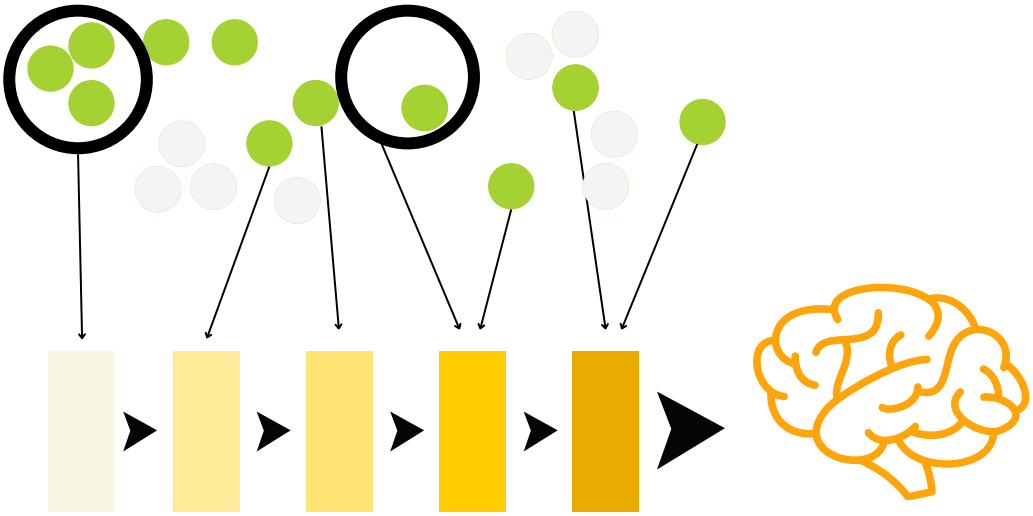
An effective strategy for avoiding chronological writing is to ensure your **topic sentences** are product-focused and **not** process-focused.

✗ **Process-Focused**	✓ **Product-Focused**
Five bolts were tested for their ultimate tensile strength to assess the accuracy of the testing rig.	The force and displacement at failure for each bolt was within the range of the force transducer and position sensor.
The first object that was tested was the climbing sling to determine the failing force and displacement.	The ultimate tensile force of the sling was tested and found to be 28.1 kN, which is higher than the manufacturer ultimate tensile force rating of 27 kN.
The dog bone is made of 6061-T6 aluminum, which has moderate strength and greater ductility than steel.	The testing rig proved capable of performing an ultimate tensile test on the aluminum dogbone. However, due to the deformation of the testing rig, some errors were present in the measured material properties when compared to the known values.

Communication engineering decisions by grounding them in support of client needs. Engineering investigation isn't just about running experiments—it's about making strategic decisions that can be justified to the client later.

While your chronological testing may have taken you in many directions, **your job is to look at the data holistically and synthesize the most relevant information into an understanding for an outsider. This will include omitting discussion of less relevant data and showing how separate data can best be understood together.**





REPRESENTING UNITS

SPELL OUT

When referring to a unit without a value, spell out the word.

- The system was tested to determine its millivolts and hertz thresholds.

ABBREVIATION

Use the acronym when the unit is accompanied by a value (number).

- Testing resulted in sensor signal uncertainty of 1.7 mV (95.4% confidence) over range of sensor amplitudes from 0 to 2.26±0.1 V when tested at 500 Hz.

BRACKETS

Bracket the acronym when it follows a variable name (to avoid confusion).

- T_1 [K]

EQUATIONS

Report unit when defining variables in equations.

- $\dot{Q}_{12} = \sigma_{exp} \cdot A_1 \cdot F_{12} \cdot (T_1^4 - T_2^4)$ [1]
- Measure Power Transferred $(\dot{Q}_{12})$ [W] was determined from Equation 1, where σ_{exp} is the Experimentally Derived Stefan-Boltzmann Constant $[\frac{W}{m^2 \cdot K^4}]$, r_1 is the Black-Body Aperture $[m]$, F_{12} is the view factor [N/A], T_1 is the Black-Body Source Temperature [K], and T_2 is the Meter Temperature [K].

MATLAB CODE

Put units in the comment at the end of each defined variable, and include units in the variable names.

INCREASE TRUSTWORTHINESS AND LOWER COGNITIVE LOAD: PRECISION, NOTATION, AND RELEVANCE

Small technical choices—symbols, units, numerical expressions, and levels of detail—signal to readers how carefully engineers think about their work. These choices should reduce reader effort, not increase it.

USE NOTATION YOUR READER EXPECTS

- Use standard technical symbols and formatting (e.g., ±, superscripts, subscripts) rather than substitutes such as +/-or caret notation (^).
- These conventions are not cosmetic; they reduce cognitive translation and signal professional precision.

Ask: Does my notation allow the reader to interpret values immediately, without mental conversion?

USE SCIENTIFIC NOTATION PURPOSEFULLY

- Scientific notation is most useful for expressing very large or very small values or for emphasizing order of magnitude.
- When it does not improve clarity or concision, prefer unit scaling (e.g., 44.1 kN) or standard numerical expression (e.g., 44,100 N).

Ask: Does this numerical form clarify scale for my reader—or does it simply apply a convention without benefit?

FILTER TECHNICAL DETAIL BASED ON AUDIENCE RELEVANCE

- Include procedural or setup details that help the reader evaluate the validity, reliability, or interpretation of results.
- Omit details that document activity but do not support understanding (e.g., internal wiring paths or DAQ port numbers, unless relevant to the claim).

Ask: Does this detail help my reader judge my conclusions—or does it merely show what I did?

KEY TAKEAWAY

Precision in notation, numerical expression, and detail selection supports trustworthiness by signaling care and competence, and intuitiveness by minimizing unnecessary cognitive load. These decisions should always be guided by the reader's needs.

Reader Benefit	**Example**
Reduces translation	`±`, superscripts
Clarifies scale	`44.1 kN`
Filters relevance	Setup constraints, not wiring paths

TECHNICAL FIGURES

Figures should be intuitive to readers and support decision-making.

CURATION

All figures must be obviously actionable to the client. Curated data and annotations explicitly show the reader what is important and should be the takeaway.

PLACEMENT

Placing figures close to their significance allows clients to make informed decisions by easily referencing visual data in relation to the supporting content. This proximity facilitates a quicker and clearer understanding of the significance of the figures. **When considering placement, prioritize how large the figure needs to be to be easily visible (intuitive).**

Placement is often determined by the size the figure needs to be to legibly display the data. If the figure must be a size that does not allow for placement beside its relevant text, then put the figure at the end of the paragraph. Otherwise, decide on its placement based on the following.

After

- Used to summarize or reinforce the findings or information presented in the text.
- After the reader has absorbed the textual content, they can refer to the visual as a concise visual summary or illustration of the key points discussed.
- Particularly useful for reinforcing the main takeaways from the text.
- **Detriment**: If the reader encounters the text without the visual context, they may not fully grasp the significance of the information until they reach the visual.

QUICK FACTS

Font
Roboto, 10

Captions
Numbered in order of appearance; aligned left with figure (NEVER CENTERED)

No Titles
Just Captions

Axes
Labeled with units

Legends
Meaningful descriptions (and units)

Markers
Discrete data points or calculations

Solid Lines
Models and predictions

Broken/Dotted lines
When additional clarity is needed

Arrows and Labels
Highlight important features

Export File
.svg from MATLAB

Number of Figures
~1/paragraph

Accessibility
Use blue and orange indicators (more below)

Beside

- Used when you want the reader to be able to refer to the visual and the accompanying text simultaneously while reading.
- Allows for a direct and constant comparison between what is described in the text and what is shown in the visual, enhancing the reader's understanding of the subject matter.
- This approach is often used for complex visuals or when it's essential for the reader to correlate specific details in the text with elements in the visual.
- **Detriment**: Can disrupt the flow of the text if not integrated seamlessly and may require careful formatting to ensure alignment and readability.
    - **If the figure becomes too small to be intuitively usable/visible, do not use beside placement.**

FIGURE TERMONOLOGY

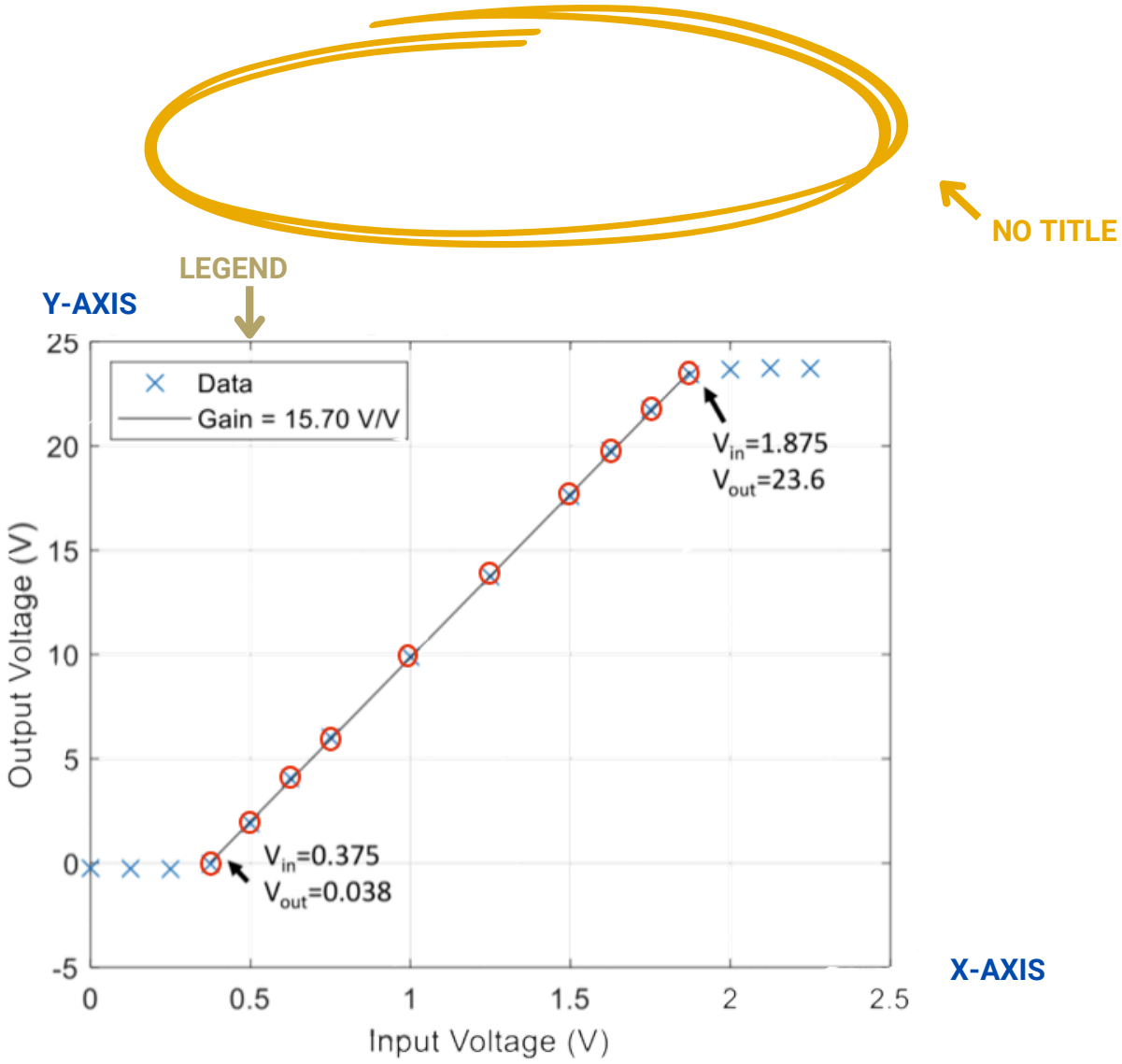


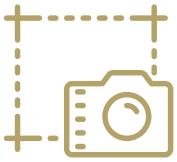
Figure 2: Block 1 amplifier linear gain with input settings of 0.357 V and 1.875 V.

CAPTION

EXPORTING FIGURES

Keep the usability of your figure in mind as you export and prepare for annotations. This will be especially true if your figure will be used in different formats (screen and printed) and genres (reports and presentations). **Excel-generated figures are not permitted**.

NOT ACCEPTABLE



SCREENSHOT

Windows key, Shift, S or Command, Shift, 4

Screenshots are limited by the resolution of your display. Taking a screenshot may result in lower quality, especially if the graph needs to be enlarged later. Dedicated exporting tools allow you to choose the resolution and file format, ensuring the highest quality output. This is crucial for maintaining clarity, especially when the graph needs to be resized or printed.

ACCEPTABLE

PNG

Portable Network Graphic

These supports both raster and transparent images while maintains good image quality, suitable for complex graphics or images with gradients. However, they are still written in pixels and have fixed resolution, so **resizing can result in loss of quality**. They are also larger file sizes compared to SVG and limited editability compared to vector formats.

BEST

SVG

Scalable Vector Graphic

SVG is a vector format, which means that the graphics are defined mathematically rather than as a grid of pixels. This makes SVG images **infinitely scalable without losing quality**. Whether the figure is displayed on a small screen or projected onto a large presentation screen, it maintains sharpness and clarity. SVG is resolution-independent, meaning that it looks the same regardless of the screen or print resolution.

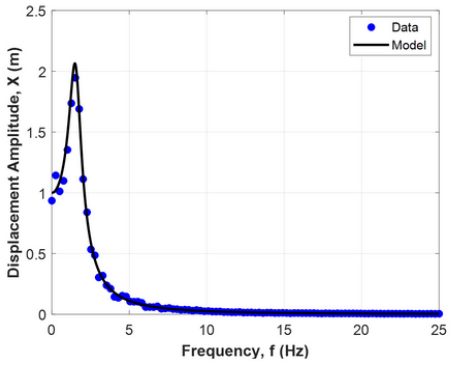
To insert an SVG in Word, you must be using Word's Desktop Application.

DESIGNING TECHNICAL FIGURES

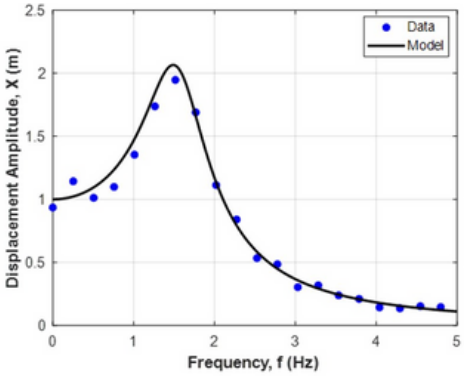
When creating technical figures, such as charts and graphs, for client audiences, it's important to follow practices that enhance **intuitiveness** and **usability**. Best practices include:

1. **Clear Annotations:**
   - Label axes, data points, and key features with clear and concise annotations.
   - Ensure that units of measurement are explicitly stated to avoid any ambiguity.
2. **Legends and Keys:**
   - Include legends or keys to explain symbols, colors, or patterns used in the figure.
   - Place legends in a location that doesn't obstruct the view of the main data.
3. **Appropriate Scaling:**
   - Choose appropriate scales for axes to ensure that the data is presented in a readable and meaningful way.
   - Avoid distorting the scale, as it can lead to misinterpretation (or misrepresentation) of the information.
4. **Use of Color:**
   - **Test for accessibility to ensure meaning is still correctly represented in grayscale.**
   - Employ a consistent color scheme that is visually appealing and aids in distinguishing different elements.
   - Consider using color strategically to highlight key data points or trends.
5. **Shading and Fill Patterns:**
   - Use shading or fill patterns to differentiate between areas or categories, especially in bar charts or maps.
   - Ensure that the shading is subtle enough not to overwhelm the data.
6. **Simplicity:**
   - Keep the figure design simple and uncluttered to avoid overwhelming the client with unnecessary details.
   - Focus on presenting the most relevant information that aligns with the client's needs.

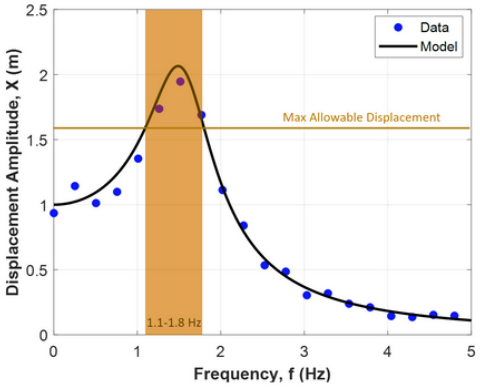
NOT ACCEPTABLE



BETTER



BEST



ACCESSIBILE FIGURES

Information designers often use blue and orange instead of green and red to annotate figures because blue and orange provide a more accessible and inclusive design for viewers, particularly those with color vision deficiencies.

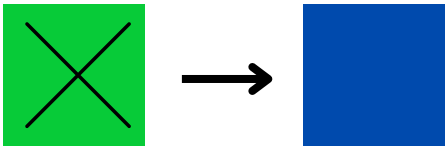
- The most common forms of color blindness, deuteranopia and protanopia (~1/12 men and ~1/200 women), affect the ability to distinguish between red and green.
- Blue and orange are distinct and easily distinguishable by most individuals with color vision deficiencies.

BURDELL'S STANDARDS

Like other companies (e.g., Microsoft) **Burdell, Inc. uses blue and orange indicators as opposed to green and red indicators**. This enables recurring clients to intuitively gather data from visualizations while upholding our accessibility standards.

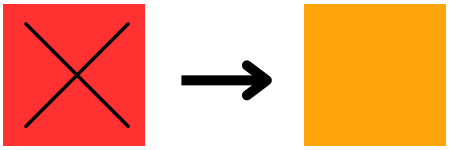
- Blue and orange create a strong contrast against each other and against most backgrounds. These colors are more distinct on the color spectrum and easier to differentiate.

BLUE = POSITIVE OR DESIRABLE



Blue as a stand-in for green, representing cool, calm, or favorable conditions.

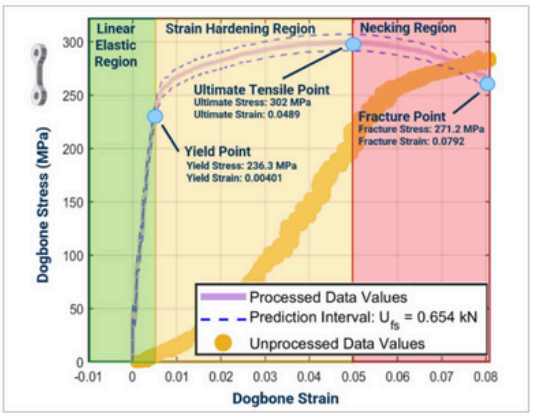
ORANGE = NEGATIVE OR UNDESIRABLE



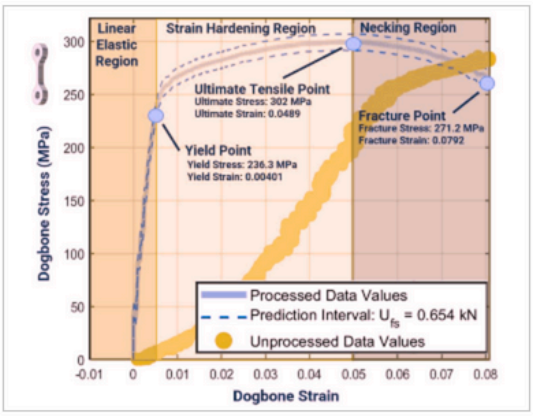
Orange as a substitute for red, representing warmth, warning, or critical conditions.

- *Success/Error Scenarios:* Replace green with blue for success and red with orange for error.
  - *Example*: Blue for "successful" and orange for an "unsuccessful" trial in a comparative trial visualization.
- *Positive/Negative Trends:* Use blue for gains and orange for losses in efficiency graphs.

ORIGINAL



SIMULATED DEUTERANOPIA
(COMMON COLOR BLINDNESS)



You can check your figures but uploading them to online resources such as PILESTONE.

INFORMATION DESIGN

You already are an information designer.

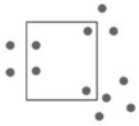
- As the person with access to the information, your communication controls your audience's experience of that information.
- To be effective, you need to purposefully design the audience's experience of that information to make it more likely that they will do want you want with that information.

Communication design mirrors engineering design in it's efforts to lower cognitive load by playing into how people already respond to and interact with visual stimuli.

Gestalt Principles of Visual Perception

Proximity: Group related annotations close to each other. For example, place labels near the data points they describe. This helps users connect labels with specific elements in the figure.

Similarity: Use similar fonts, colors, or shapes for related annotations. This creates a visual association between elements and communicates their similarity or shared characteristics.



Closure: Enclose related information using shapes or lines. For instance, draw lines to connect labels to corresponding data points, forming a closed shape. This enhances the perception of connectedness.

Continuity: Arrange annotations in a continuous manner to guide the viewer's eye along a path or sequence. This is particularly useful when annotating time or trail-series data.

Common Fate: Align annotations that share a common purpose or relate to the same aspect of the figure. This reinforces the idea that these annotations belong together and serve a shared function.

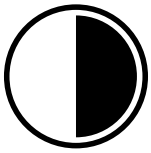
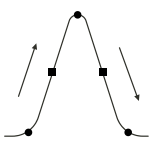


Figure-Ground: Ensure a clear contrast between the figure (main content) and annotations. Use different colors or shades to distinguish between the background and the annotated elements, improving overall visibility.



Connectedness: Use connecting lines or arrows to show relationships between annotations and corresponding elements in the figure. This reinforces the idea that certain elements are connected or dependent on each other.

FIGURE ANNOTATION SOFTWARE

CANVA

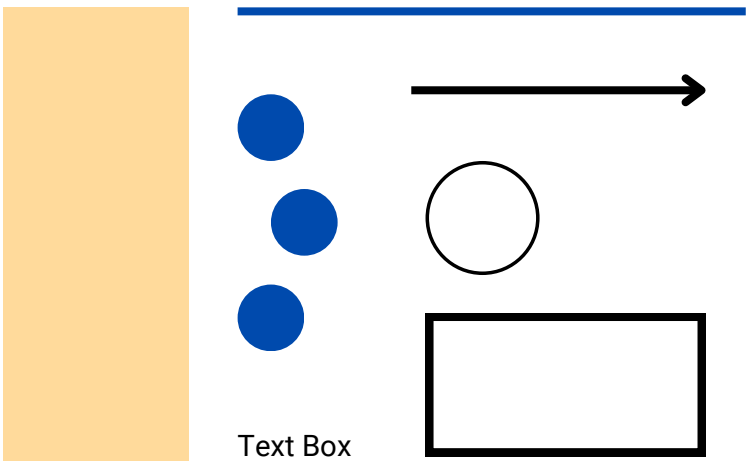
Canva provides a rich library of pre-designed elements, including icons, shapes, and text styles. This extensive collection allows users to easily add annotations, labels, and other graphical elements to their figures without the need for external design resources. It also allows for easy manipulation of layering and transparency.

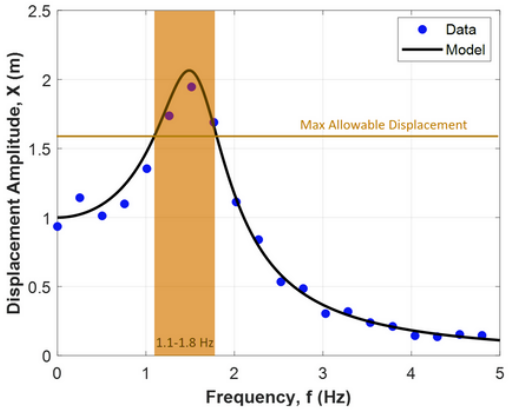
As an online tool, no app download is needed, and it facilitates collaboration among team members by allowing multiple users to work on a design simultaneously. This is useful for projects that involve input and feedback from different team members.

POWERPOINT

PowerPoint provides a range of text and drawing tools, allowing users to add annotations, labels, and other textual elements directly onto figures. This facilitates clear communication of key points within the figure.

PowerPoint enables users to layer and order elements, including figures and annotations. This is crucial for ensuring that annotations appear in the desired sequence and don't obstruct important parts of the figure. Users can customize the appearance of annotations by adjusting fonts, colors, sizes, and styles. This flexibility ensures that annotations align with the visual style of the figure and the overall presentation.





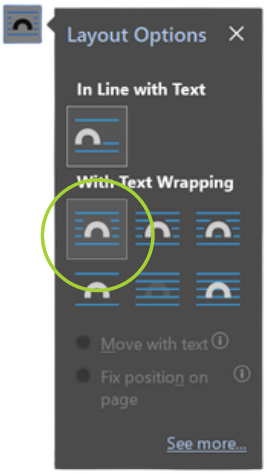
INTEGRATING FIGURES IN WORD

1 INSERT VISUAL

1.1. Open your Microsoft Word document.
1.2. Go to the location in your document where you want to insert the visual.
1.3. Click on the “Insert” tab in the Word toolbar.
1.4. Select “Pictures” to insert an image from your computer.
1.5. Navigate to the image file you want to insert on your computer.
1.6. Once you’ve selected the image, click the “Insert” button. The image will be placed in your document.

2 TEXT WRAP VISUAL

2.1. Click on the inserted visual to select it.
2.2. Go to the “Format” tab in the Word toolbar.
2.3. In the “Arrange” group, you'll find options for positioning and aligning the visual.
2.4. Click on “Wrap Text” and choose the text wrapping option “Square.”
2.5. You can now drag the visual to the desired location within your document. It should seamlessly integrate with the surrounding text.



3 TITLE VISUAL

3.1. Right click on the visual.
3.2. Select “Insert Caption.”
3.3. Type in the title of your visual.
3.4 Change font to Roboto 10, black, no italics.

REFERRING TO FIGURES

In addition to placing figures in the body of the report, you should directly refer to your figures and call attention to their information that is most usable for making decisions. Doing this requires more than merely stating “see figure”; instead, make the value of your figures intuitive by explicitly telling the reader what to look at in the figure.

Non-Intuitive Integration ✗	As seen in Figure 1, ...
Intuitive Integration	The orange shaded area of Figure 1 designates ...
	The rightmost column in Table 2 shows distance of [x] in order from shortest to longest.
✓	The visual peak (circled in Figure 3) represents ...

Figures document data (evidence); therefore, it is unusual to refer to them in the topic sentence because, in typical paragraph structure, sentences on evidence come after claims (which are made in the topic sentence).

REMINDER

TS *(TOPIC SENTENCE)* → ***E*** *(EVIDENCE)* → ***C*** *(COMMENTARY)* → ***C*** *(COMMENTARY)* → ***E*** *(EVIDENCE)* → ***C*** *(COMMENTARY)* → ***C*** *(COMMENTARY)* → ***TA*** *(TAKEAWAY)*

LISTS & TABLES

Lists should be integrated into paragraphs to provide context, interpretation, and a narrative flow to the information they present. By incorporating them into the text, the writer can guide readers on how to understand the information, highlight key points, and ensure that the information aligns with the overall purpose of the document.

This integration enhances the clarity and coherence of the content, helping readers understand the significance of the listed or tabulated information in the broader context of the text.

BULLETED LISTS

Use bulleted lists to emphasize key points, list items without a specific sequence For example, you'd use this list when you want to demonstrate:

- Equal or Egalitarian Nature
- Similarity
- No Implied Priority or Order

Lists should always be sandwiched between paragraphing that introduces the list and clarifies how the list should be understood or used.

Ultimately, the choice between bulleted and numbered lists depends on the specific content and the message you want to convey.

NUMBERED LISTS

Numbered lists should be used in specific circumstances. These include:

1. To convey a sequence.
2. To demonstrate priority or hierarchy.
3. To enhance quick reference to a particular listed point.

This list, for example, is numbered because the order of the listed material is from when it is most vital to use a numbered list to when it is more of a style preference.

Consistency within lists is crucial for maintaining clarity and readability in a document. **Lists can be presented as words or phrases, or as full sentences, but maintaining internal consistency within each list ensures a cohesive and organized presentation**. It is acceptable to use both types of lists within the same document.

TABLES

Step	Activity	Equipment	Parameters
1	Prepare blackbody device	Source, mounting fixture	N/A
2	Set up temperature control	Controller, thermocouples	Initial temperature: 300 K
3	Calibrate temperature sensors	Reference thermometer	Compare with reference
4	Establish experimental setup	Vacuum chamber, insulation	Low-pressure environment
5	Power on blackbody source	Power supply, control panel	Gradual power increase
6	Measure radiation spectrum	Spectrometer, data system	Record wavelength data
7	Vary temperature for observation	Temperature controller	Incremental adjustments
8	Capture thermal images	Infrared camera	Document temperature distribution
9	Analyze collected data	Data analysis software	Evaluate trends

Tables should appear at the end of the paragraph to their key relevance. They should be titled and captioned in the same style as figures with the exception of the title should be placed above the table (and left aligned).

Tables should use type-facing, alignment, and color to enhance the intuitiveness of the information while avoiding the over-production of visual stimuli. Use center-alignment sparingly if at all. When they are needed, make gridlines non-invasive.

CHOOSING THE APPROPRIATE TOOL

Tables are effective for presenting detailed, precise, and varied data that the audience may need to reference or analyze closely. They are also essential for small datasets and for providing comprehensive data comparisons. Charts, on the other hand, are powerful for illustrating trends, patterns, and making data more visually appealing and easier to comprehend at a glance.

TABLES

Precise Data Representation:

Exact Values: when you need to present precise numerical values; allows reader to see specific numbers rather than general trends or patterns.

Complex Data:

Multiple Variables: when using data that has multiple variables or dimensions needing simultaneous presentation.

Mixed Data Types: when data includes different types of information (e.g., numerical values, text, dates), tables can accommodate this variety effectively.

Examples of Appropriate Use of Tables in Engineering Reports:

Material Properties: Listing the properties of different materials such as density, tensile strength, thermal conductivity, etc.

Specifications: Providing detailed technical specifications of components, parts, or systems.

Schedules and Timelines: Presenting project schedules, timelines, and milestones in a clear and organized manner.

Comparison of Alternatives: Comparing different design alternatives, costs, or performance metrics side by side.

CHARTS

Visualizing Trends and Patterns:

Demonstrate Change: when you need to present precise numerical value show how data changes over time or across different conditions.

Visualize Patterns: when you need to present precise numerical value highlight trends, correlations, and distributions.

Simplifying Complex Data:

Summarize: use to provide a visual summary of large datasets to make overall trends easier to grasp.

Emphasize: use to demonstrate the big picture rather than the details.

Examples of Appropriate Use of Charts in Engineering Reports:

Performance Over Time: Plotting performance metrics (e.g., stress-strain curves, temperature changes) over time or under varying conditions.

Comparative Analysis: Comparing the efficiency or output of different systems or processes.

Distribution Analysis: Showing the distribution of data points, such as histograms for frequency distributions or scatter plots for correlations.

PRONOUN USE & REFERRING TO "THE TEAM"

When professionals read reports, they typically want to extract key information quickly to inform decision-making. A more direct and concise writing style that prioritizes technical details and results can better serve this purpose. Personal pronouns likely divert attention away from the critical content.

The use of personal pronouns or explicit references to the team can occupy important positions within a sentence, roles that could otherwise be dedicated to conveying technical information or data.

Consider these revisions of a sentence from a methodology section:

NOT ACCEPTABLE

The team segmented the data by aperture size and distance to yield multiple distinct regression lines.

Subject Verb Object Object of the Preposition

Sentence above prioritizes the **team**, and regulates the most actionable information to a less important position. We often call this "burying the lede."

BETTER

By segmenting the data based on aperture size and distance, the team achieved the generation of

Prepositional Phrase Subject Verb Direct Object

multiple distinct regression lines.

Object of the Preposition

The emphasis, here, is on the technical **process**, making it more accessible to an audience interested in the specific actions taken.

BEST

By segmenting the data based on aperture size and distance, the data was used to generate multiple

Prepositional Phrase Subject Verb

distinct regression lines.

Direct Object

The sentence emphasizes the **result** of the process - the generation of multiple distinct regression lines - which is likely of interest to clients who are concerned with outcomes and data analysis.

COMMUNICATING WITH NUMBERS

IEEE STYLE RULES

- **Numbers 10 and Above:** Use Arabic numerals (e.g., "15 participants").
- **Numbers Below 10:** Typically spelled out (e.g., "three trials"), but exceptions exist for technical contexts, such as units of measure, percentages, and mathematical expressions (e.g., "3 mm," "5%").
- **Numbers in Titles:** Follow the same general rules as the body text.
- **Units and Symbols:** Always use numerals with units (e.g., "3 mA").

BEST PRACTICES FOR NUMBERS IN TECHNICAL REPORTS

1. Always Prioritize Clarity and Precision:

- Use Arabic numerals for all data, measurements, and calculations, regardless of size/quantity (e.g., “5 samples,” “3.14 cm”).
  - This practice avoids ambiguity and aligns with the expectations of technical readers.

2. Maintain Consistency:

- If your report includes a mixture of numbers, stick to a consistent format within the same context or section.
  - For example, in a results table, do not switch between “ten” and “10.”

3. Follow Industry Standards for Units:

- Always pair Arabic numerals with units of measurement, which should be abbreviated in standard format (e.g., “7 kg,” “15 ms”).
- Avoid spelling out numbers with units unless they are part of the narrative and do not indicate data (e.g., “The experiment lasted three hours” versus “3 hours”).

4. Use Numerals for Quantities, Dates, and Percentages:

- For technical contexts, always use numerals for quantities (e.g., “5 experiments”), percentages (e.g., “95%”), and dates (e.g., “July 4, 2024”).

5. Spell Out Numbers in Non-Technical Contexts:

- Use words for numbers in general text or **when they begin a sentence** (e.g., “Twenty participants were selected”).
  - Alternatively, rewrite the sentence to avoid starting with a numeral: “A total of 20 participants were selected.”

6. Group Similar Numbers:

- When multiple numbers appear in proximity and some are greater than 10 while others are not, use numerals for all to improve readability (e.g., “There were 7 groups with 15 members each”).

7. Tables, Figures, and Labels:

- Always use Arabic numerals in data presentations such as tables, graphs, and captions (e.g., “Table 3,” “Figure 2”).
- Label figures and tables numerically even if they contain textual descriptions.

8. Use Words for Approximate Values or General Contexts:

- When the exact value is not critical, you may spell out numbers to improve the flow of the text (e.g., “Approximately three dozen parts were tested”).

REFERENCES

You do not need to cite Burdell, Inc. materials. In any cases where references are needed, use IEEE style.

IN-TEXT REFERNENCES

In-text references should be cited in-line where they occur (not at the end of the sentence) by referring to its number in your reference list, the last name of the lead author, and applicable page number in square brackets. They should appear inside the punctuation when applicable.

EX.
[3, Lemma 2];

REFERENCE LIST

If references are made, a complete reference list should be include at the end of reports. and labeled “References.” These should be cited according to current IEEE style and numbered.

COMMONLY USED RESOURCES IN IEEE STYLE

Manuals/Software
J. K. Author (or Abbrev. Name of Co., City of Co. Abbrev. State, Country). Name of Manual/Handbook, x ed. (year). Accessed: Date. [Online]. Available: http://www.url.com

Book With Chapter Title
J. K. Author, “Title of chapter in the book,” in *Title of Published Book*, X. Editor, Ed., City of Publisher, State (only U.S.), Country: Abbrev. of Publisher, year, ch. x, sec. x, pp. xxx–xxx.

Book With Editor(s)
J. K. Author, “Title of chapter in the book,” in *Title of Published Book*, X. Editor, Ed., City of Publisher, State (only U.S.), Country: Abbrev. of Publisher, year, pp. xxx–xxx.

COMPLETE IEEE REFERENCE GUIDE LINK

NOTES

CREATED BY THE WEBB COMMUNICATION PROGRAM

UNANSWERED QUESTIONS?

Defer to IEEE style regulations when this guide does not answer your questions.