Prompt Engineering for Business School Students

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Overview

Overview

What prompt engineering is

Not magic words
Prompt engineering is not about finding a secret phrase that makes the model smart.

A work-design skill
It is the practice of defining the task, context, constraints, output, and review standard.

Useful across business school
It helps with cases, research briefs, spreadsheet support, writing, presentations, and interview prep.

Still requires judgment
The model can accelerate work. It cannot own the facts, the decision, or the accountability.

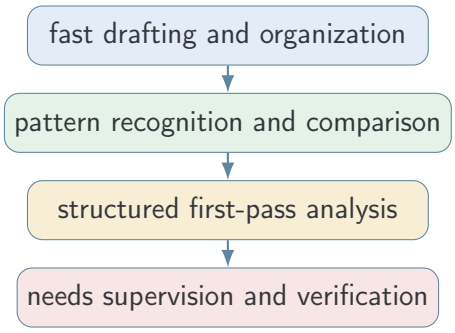
Core claim: better prompts are clearer work orders.

Why business-school tasks need better prompts

Task type	What students often ask	What the task really requires
Case analysis	"Analyze this case."	Extract facts, identify trade-offs, compare options, make a defensible recommendation.
Research brief	"Summarize these sources."	Separate reliable evidence from weak claims, synthesize themes, flag uncertainty.
Spreadsheet support	"Check my model."	Explain formulas, trace assumptions, test edge cases, identify inconsistent logic.
Writing and slides	"Make this better."	Clarify audience, sharpen argument, remove filler, preserve factual claims.

High-value work is usually a **multi-step job**, not a one-line question.

Mental model: fast junior collaborator



How to manage it

- Give the assignment clearly.
- Provide the right source packet.
- Ask for useful intermediate artifacts.
- Review the output like a manager.
- Own the final judgment.

Two habits to avoid

Slot-machine prompting

Typing vague one-line prompts, hoping for brilliance, and accepting whatever comes back.

Symptom: the answer sounds generic, long, and not tied to your materials.

Polish bias

Trusting the answer because it is fluent, confident, and professionally worded.

Symptom: you stop checking facts because the prose feels credible.

Fluency is not evidence. A polished answer can still be wrong.

A simple example: one decision, two prompts

Weak prompt

Analyze whether Northstar Foods should launch a subscription business and write a recommendation.

Stronger prompt

You are helping me prepare a one-page class memo on Northstar Foods. Use only the case notes I provide. First extract the facts that matter for the launch decision. Then compare arguments for and against the subscription model using four criteria: customer value, economics, execution risk, and strategic fit. Return a 6-row fact table, a decision table, and a recommendation under 180 words. If the evidence is insufficient, say what is missing rather than inventing facts.

Why the stronger prompt works

Prompt feature	What it adds	Why it helps
Scope	One memo for one launch decision	Reduces generic filler.
Source boundary	Use only the case notes	Limits invented outside facts.
Process	Extract, compare, recommend	Separates evidence from judgment.
Criteria	Four named decision dimensions	Makes the recommendation balanced.
Output shape	Fact table, decision table, short recommendation	Makes the answer easier to inspect.
Uncertainty rule	Say what is missing	Rewards honesty over guessing.

The better prompt does not make the model perfect. It makes the work easier to check.

Overview

The five building blocks

1. **Objective** What job should the model do?
2. **Context** What materials, facts, audience, or assumptions matter?
3. **Constraints** What should the model avoid, compare, or verify?
4. **Output format** What structure should come back?
5. **Quality control** How should uncertainty and weak evidence be handled?

1. Objective: name the job

Weak objective
"Help me with this case."

Problem
The model does not know whether you need a summary, a memo, a debate prep sheet, or a recommendation.

Stronger objective
"Build a decision table comparing three market-entry options and recommend one."

Better test
Could another person know exactly what artifact to produce?

Use verbs that describe the work: **extract**, **compare**, **classify**, **draft**, **critique**, **revise**, **explain**, **prioritize**.

2. Context: supply the packet

Useful context

- Audience and purpose
- Relevant documents or notes
- Decision criteria
- Known assumptions
- Deadline, length, or format

Prompt pattern

Use the materials below as the full source packet. Do not assume facts outside the packet. The audience is a first-year MBA section. The output should help me prepare a concise class contribution.

Context is the difference between a generic answer and an answer fitted to your actual task.

3. Constraints: prevent avoidable failure

Constraint	Prompt wording	Why it matters
Source boundary	Use only the attached case notes.	Reduces unsupported outside claims.
Length	Keep the recommendation under 180 words.	Prevents rambling.
Scope	Do not write the final memo yet.	Supports staged work.
Assumptions	Label assumptions explicitly.	Makes uncertainty visible.
Style	Use concise executive language.	Matches a business audience.

A good constraint is not a restriction for its own sake. It protects the quality of the output.

4. Output format: make the answer inspectable

Tables
Best for comparison, extraction, classifications, and source logs.

Issue trees
Best for structuring causes, options, risks, and hypotheses.

Memos
Best for final synthesis, recommendation, and audience-ready argument.

Prompt pattern

Return the answer in this order: (1) a table with issue, evidence, implication, and uncertainty; (2) three prioritized recommendations; (3) two risks that could change the recommendation.

5. Quality control: tell the model how to be honest

Without quality control

The model may fill gaps with plausible language, hide uncertainty, or blur facts with interpretation.

Add a rule

If the evidence is insufficient, say what is missing rather than guessing.

Useful labels

- Known fact
- Inference
- Assumption
- Open question
- Needs verification

A fill-in prompt canvas

Field	Fill in the blank
Role or job	You are helping me as a [case analyst / research assistant / writing coach / spreadsheet explainer].
Task	I need [specific deliverable or decision].
Inputs	Use [documents, notes, data, or facts].
Constraints	Do not [invent facts / use outside sources / exceed the limit / ignore counterarguments].
Output	Return [table / memo / bullets / outline / checklist].
Quality bar	Flag uncertainty, label assumptions, and say what information would most improve the answer.

The canvas is not a script. It is a checklist for avoiding vague assignments.

Overview

Seven durable techniques

1. Clarify first
Ask for missing information before answering.

2. Extract before interpreting
Build the factual base first.

3. Break tasks into stages
Use prompt chains for complex work.

4. Ground in provided material
Name and limit the sources.

5. Request structured outputs
Use tables, trees, memos, and checklists.

6. Give examples or rubrics
Show what good output looks like.

7. Ask for critique
Use the model as a skeptical reviewer.

Technique 1: ask for clarification first

When to use it

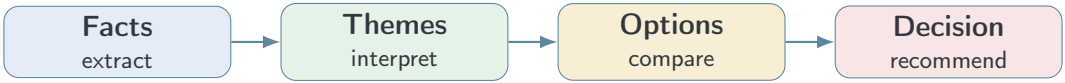
Use it when audience, purpose, format, or decision criteria could materially change the answer.

Prompt pattern

Before answering, ask up to five clarifying questions that would materially change the output. If the task is clear enough, state your assumptions briefly and proceed.

Good clarification reduces rework. Bad clarification asks questions that do not matter.

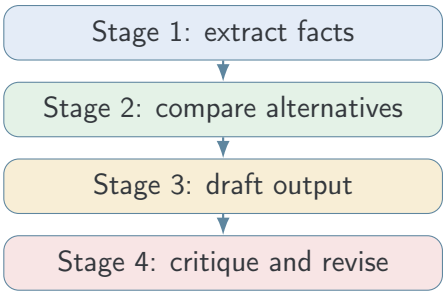
Technique 2: separate extraction from interpretation



Prompt pattern

Step 1: extract relevant facts into a table. Step 2: identify themes or trade-offs. Step 3: recommend. Do not skip directly to Step 3.

Technique 3: break large tasks into stages



Why it works

One giant prompt often produces one giant answer. A staged workflow produces artifacts you can inspect and improve.

Technique 4: ground the answer in provided material

Good grounding habits

- Name the source packet.
- Delimit the material clearly.
- Ask for quotations when wording matters.
- Mark unknowns instead of guessing.

Prompt pattern

Use only the meeting transcript and market research notes below. When a claim matters, quote the relevant sentence or number. If the packet does not support a conclusion, label it as an open question.

Technique 5: request structured outputs

Output type	Best for	Example
Fact table	Source extraction and checking	Source, fact, implication, uncertainty.
Decision table	Option comparison	Option, upside, downside, evidence, risk.
Issue tree	Strategy and operations cases	Root issue, drivers, subdrivers.
Checklist	Review and quality control	Formula checks, source checks, missing evidence.
Memo outline	Communication	Headline, evidence, recommendation, risk.

Structure makes the answer easier to review, compare, and reuse.

Technique 6: use examples, rubrics, or success criteria

Useful inputs

A sample memo, grading rubric, scoring scheme, or good-vs-weak contrast.

Why it helps

The model can align to the quality bar instead of guessing what "good" means.

Prompt pattern

Write the response in the style of a concise consulting note. A strong answer should be specific, source-grounded, balanced, and no longer than 300 words. Avoid slogans, repetition, and unsupported claims.

Technique 7: ask for critique, not just completion

Production prompt

Create the first-pass artifact: summary, table, memo, outline, or explanation.

Review prompt

Challenge the first pass: weak claims, hidden assumptions, missing evidence, and stronger alternatives.

Prompt pattern

Act as a skeptical reviewer. What are the five weakest claims in this memo? For each, explain why it is weak, what evidence is missing, and how the claim should be revised.

Overview

Case analysis: a reusable prompt chain

1. Extract
facts, constraints, options, stakeholders

2. Compare
criteria, trade-offs, risks, unknowns

3. Draft
recommendation, evidence, objections

4. Review
weak claims, missing facts, better framing

Do not start by asking for the final answer. Start by creating a clean fact base and decision structure.

Research brief: protect source quality

Stage	Good prompt behavior	Watch-out
Collect	Ask for source labels, dates, authors, and evidence type.	Mixing reliable sources with weak summaries.
Synthesize	Group themes and contradictions.	Hiding disagreements across sources.
Write	Separate facts from interpretation.	Overstating evidence or copying source language.
Verify	Ask what still needs checking.	Treating a generated citation as proof.

Prompt pattern

Use only the sources below. Build a table with source, key point, why it matters, and uncertainty or conflict. Then give a brief synthesis in plain language.

Spreadsheet support: use the model as an explainer

Good use
Explain formula logic, trace dependencies, suggest sanity checks, and identify likely mistakes.

Risky use
Treating the model as a calculator or copying formulas you do not understand.

Better prompt
"Explain this section line by line, then list the three most common modeling errors."

Best habit
Ask for purpose, mechanics, interpretation, and error checks as separate outputs.

Writing and slides: use AI after you have a point of view

Good writing support

- tighten an argument
- remove repetition
- adapt tone to audience
- turn notes into an outline
- improve slide headlines

Prompt pattern

Revise the text below for a senior executive audience. Keep my main argument. Preserve all numbers and factual claims exactly. Remove repetition, improve flow, and after the rewrite list the three biggest changes.

LLMs are best at polishing writing after the underlying analysis is already owned by the student.

Interview preparation: make it sound like you

Useful support
Question banks, STAR story refinement, mock follow-ups, and feedback on clarity.

Watch-out
Generic answers that sound polished but do not sound like you.

Prompt with context
Specify the role, company, interview type, your background, and the stories you want to practice.

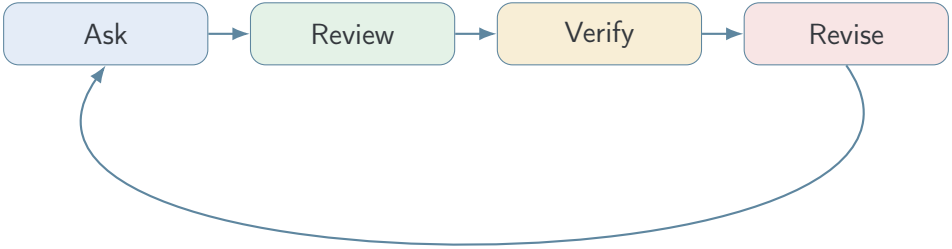
Better habit
Ask for feedback first, then revise in your own voice.

Overview

Common failure modes

Failure mode	What it looks like	Better move
Vague objective	"Help me with this."	Name the exact deliverable.
Too many jobs	Research, analysis, writing, and formatting in one prompt.	Split into stages.
No source boundary	The model blends outside facts with your packet.	Specify allowed sources.
No output shape	The answer is long and hard to reuse.	Ask for a table, checklist, outline, or memo.
No verification	Polished answer with quiet errors.	Add a reviewer pass and check key facts.
Over-engineering	Huge prompt for a tiny rewrite.	Match prompt complexity to task complexity.

The verification loop



Verify facts
Check claims, numbers, dates, citations, and source boundaries.

Verify logic
Check assumptions, trade-offs, missing counterarguments, and fit with the assignment.

Keep a tiny prompt log

Field	Question
Task	What job was I trying to do?
Prompt version	What did I actually ask?
What worked	Which part of the answer was useful?
What failed	What was vague, wrong, or too generic?
Revision	What would I change next time?
Verification note	What facts or claims still required checking?

Prompting skill compounds when students save what works and learn from what fails.

A compact prompt library

Decision memo

Extract facts, compare options on criteria, then recommend.

Research synthesis

Use named sources; report key point, relevance, and uncertainty.

Spreadsheet explainer

Explain purpose, major formulas, assumptions, and error checks.

Writing improver

Preserve facts; improve flow, clarity, and tone.

Red-team reviewer

Find weak claims, hidden assumptions, and missing evidence.

Interview coach

Practice questions, feedback, and follow-up probes.

Overview

Practice exercise: rewrite a weak prompt

Weak prompt

Help me with my market-entry case and tell me what the company should do.

Your task

Rewrite the prompt using the five building blocks: objective, context, constraints, output format, and quality control.

Success criteria

The revised prompt should force a source-grounded, structured, and reviewable answer.

Practice exercise: build a two-prompt chain

Prompt 1: production
Ask for a useful first artifact: fact table, option comparison, draft memo, or explanation.

Prompt 2: review
Ask for a critique: weak claims, missing evidence, unclear assumptions, and suggested fixes.

Deliverable

Write both prompts for one real task you face this week. Then run them and record what changed between the first and second output.

What not to obsess over first

Focus on first

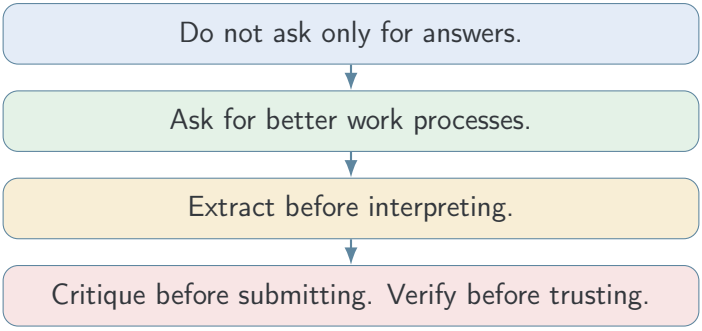
- clear objective
- source boundaries
- output structure
- critique loop
- verification habit

Usually later

- exotic prompt tricks
- specialized syntax
- tool settings you do not understand
- giant prompts for tiny tasks

A strong beginner prompt is clear, scoped, source-aware, and easy to review.

Final takeaway



Prompt engineering is a practical management skill: assign work clearly, supervise carefully, and own the outcome.