2:05 80

Student F...
ook.google.com

Sources Chat Studio

3. Simple Harmonic Motion (SHM) & Energy Conservation

- **Governing Force:** SHM is a periodic motion where the net restoring force ($F = -kx$) is directly proportional to displacement and acts toward the equilibrium position [12] [13].
- **Oscillatory Parameters:** Key mathematical properties include amplitude (A) and time period ($T = 2\pi\sqrt{m/k}$), frequency (ν)

Ask a question or create something (3)

Gemini Notebook can make mistakes, so double-check it.

What did elon musk say about quantum computing in 2024?

Thoughts

Your sources do not contain any information about Elon Musk or quantum computing—they focus instead on AI assignment verification, programming logic, and physics notes on waves and oscillations.

Would you like me to conduct some

Ask a question or create something

(3)

Gemini Notebook can make mistakes, so double-check it.

2:13 79

Student F...
ook.google.com

Oscil...

View 3 sources

1 / 12

In the corrected Python water usage billing script from the assignment report, how is the usage charge calculated when water consumption (`litre`) is greater than 10,000 litres?

A. usage_charge = (5000 * 0.50) + ((litre - 5000) * 1.00)

This misses the second tier pricing block for consumption between 5,000 and 10,000 litres.

Results

Next

Good content

Bad content

2:11 79

Student F...
ook.google.com

Sources | Chat | Studio

Your sources do not contain any information about Elon Musk or quantum computing—they focus instead on AI assignment verification, programming logic, and physics notes on waves and oscillations.

Would you like me to conduct some **web research** to find out what Elon Musk said about quantum computing in 2024?

Ask a question or create something (3)

Gemini Notebook can make mistakes, so double-check it.

2:07 80

Student F...
ook.google.com

Sources Chat Studio

CT&PSP_SampleAssignme...

Source guide

members.

Batch Reflection

AI tools gave us a quick starting point, but one of the two answers failed on a simple tie case. Writing our own logic first, then verifying by hand and by code, is what turned the AI output into a correct solution.

11. AI Tools Used & References

AI Tools Used

AI Tool	Version	Used For	Exec By
OpenAI ChatGPT	GPT-4o	Algorithm, pseudocode,	B. Si Vars

2:13 79

Student F...
ook.google.com

Oscil...

View 3 sources

8 / 12

What condition leads to maximum vibration amplitude in a forced harmonic oscillator (resonance)?

A. The damping coefficient β exceeds the natural frequency ω_0.

Excessive damping suppresses oscillations rather than creating resonant amplitude peaks.

B. The external force frequency is

Results Previous Next

Good content Bad content

12 / 12

Why did the student team in Assignment M1-A9 reject AI's suggestion to conduct unstructured debate sessions?

A. Unstructured debates failed to produce verifiable, observable evidence of individual speaking proficiency.

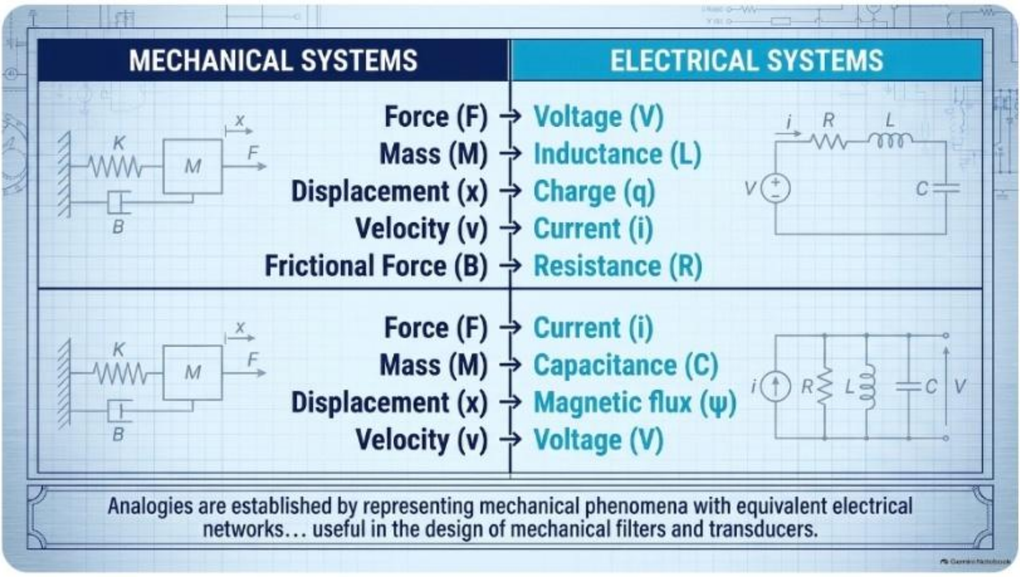
B. Unstructured debates required

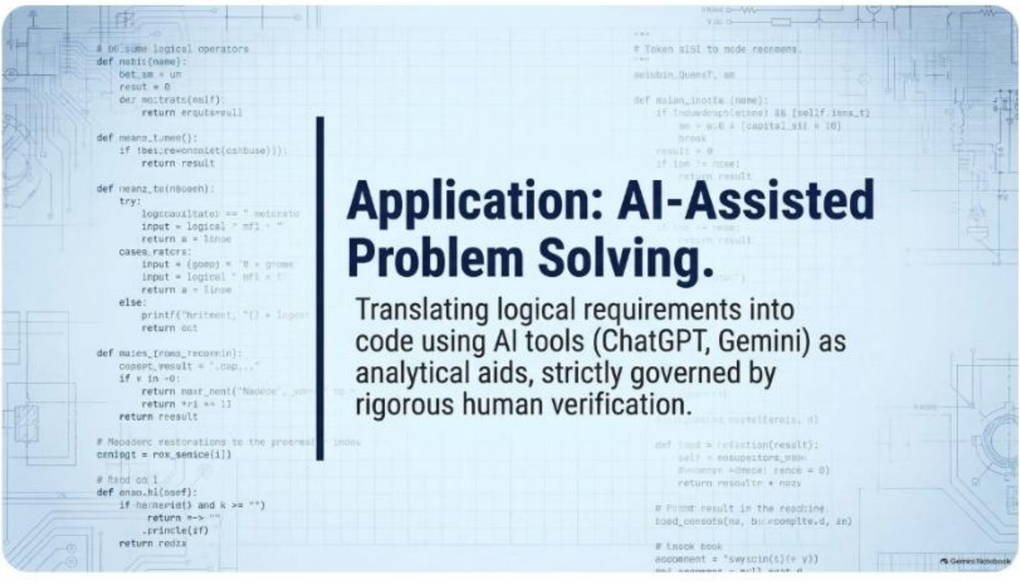
2:25 77

Student F...
ook.google.com

View 3 sources







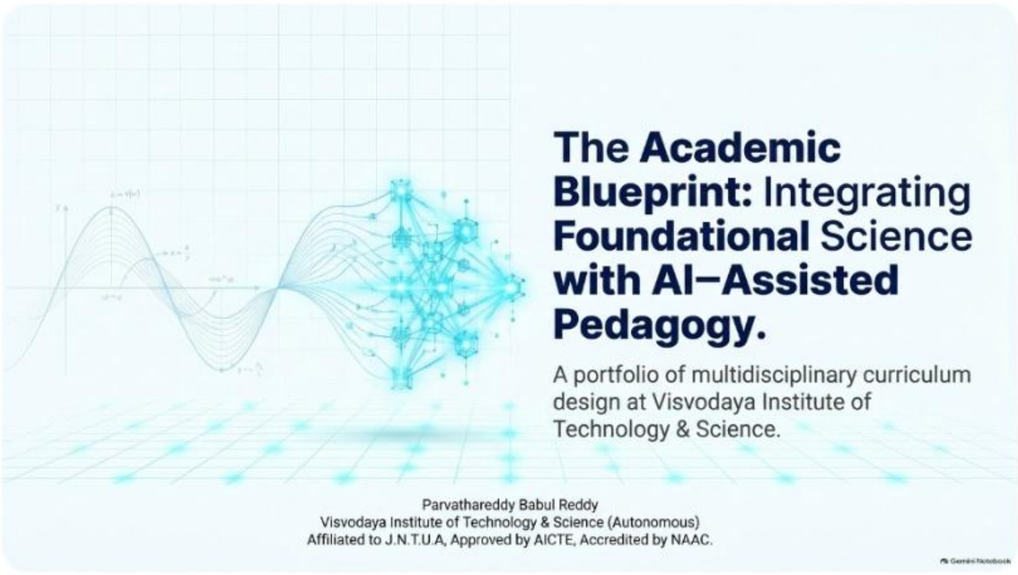


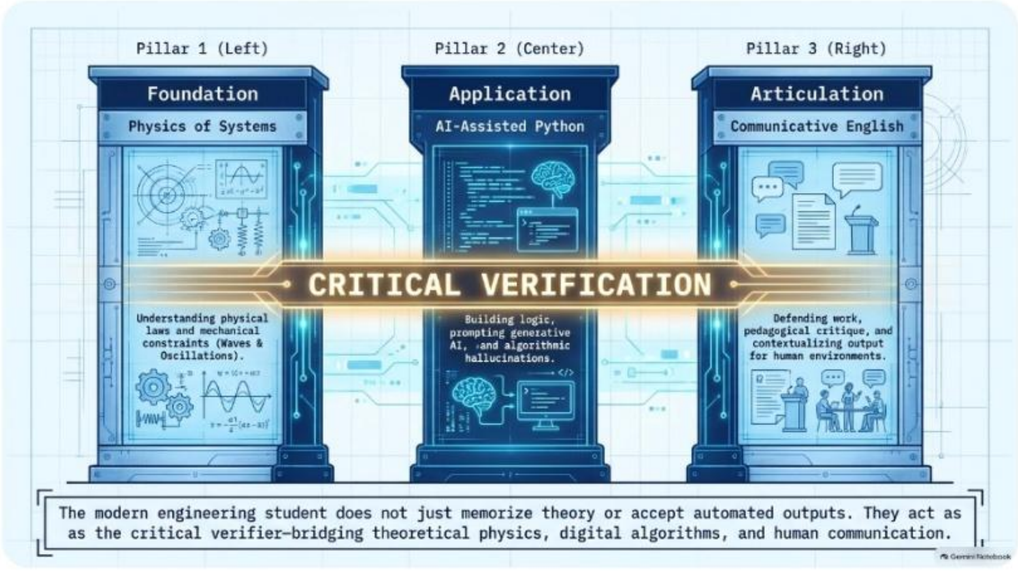
Good content Bad content

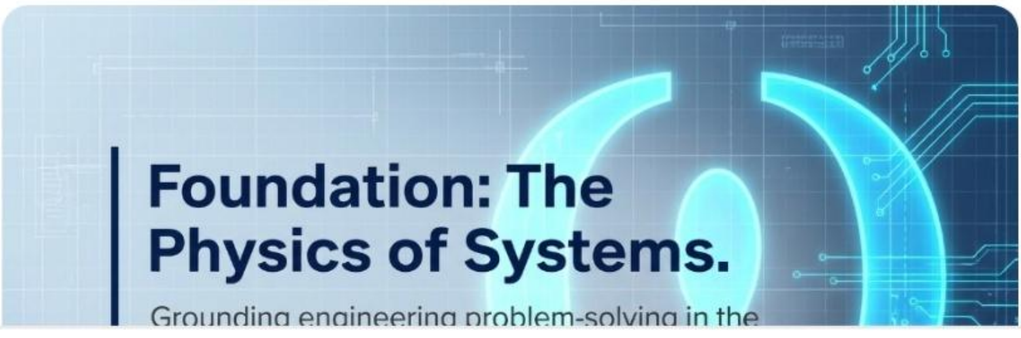
2:25 77

Student F...
ook.google.com

View 3 sources







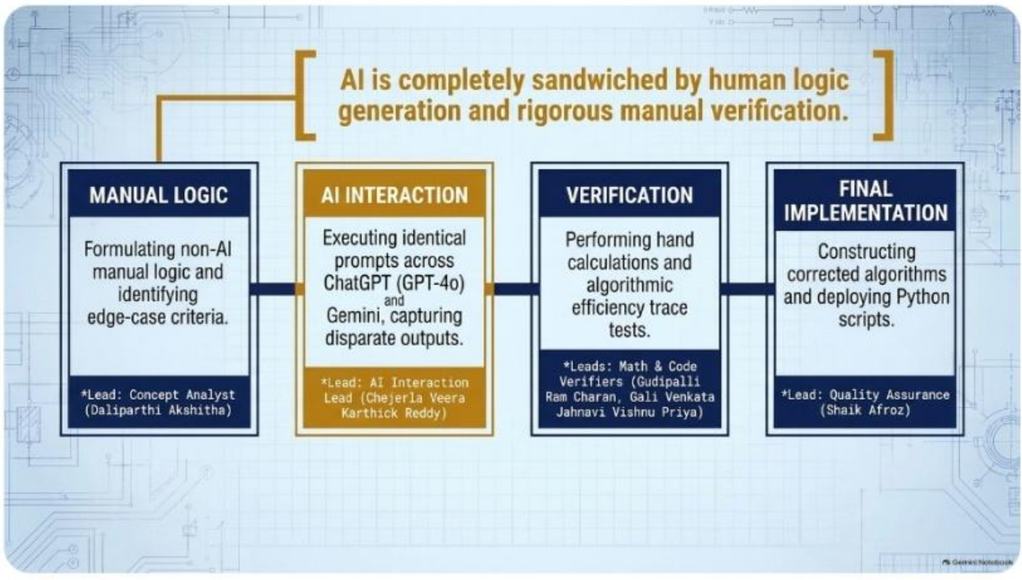
Good content
Bad content

2:25 77

Student F...
ook.google.com

View 3 sources





Algorithmic Edge-Case Handling: ChatGPT vs. Gemini

Evaluation Metric: Determining if an integer is a palindrome.

Edge Case / Metric	ChatGPT (GPT-4o)	Gemini
Positive Numbers	✅ Works	✅ Works
Zero	✅ Works	✅ Explicitly handled
Single Digit	✅ Works	✅ Works
Negative Numbers	❌ Not clearly specified	✅ Explicitly handled
Trailing Zero	⚠️ Requires verification	✅ Correctly produces different reversed value
Flowchart Logic	Basic linear flow	Uses separate decision steps

Conclusion: Gemini provided more robust edge-case handling for negative variables, while ChatGPT required tighter human oversight for trailing zeros.

Auditing AI Hallucinations: Water Billing Algorithm

Logic Errors	
AI Output	Human Correction
Allowed negative meter readings.	Validate Current ≥ Previous.
Tiering Errors	

Good content Bad content