Education & Learning

Generate structured, self-paced learning paths from beginner to competent — including week-by-week breakdowns, practice activities, and milestone projects.
Difficulty: Advanced
Model: GPT-4 / Claude / Gemini
Use Case: Course Creation, Self-Study Planning, Corporate Training
Updated: May 2026
Why This Prompt Exists
Most AI-generated curricula fail because they list topics instead of sequencing understanding.

You get:

- a random list of “things to learn”
- no dependency mapping (what must come before what)
- no time estimates or pacing guidance
- no practice activities integrated with concepts
- no milestone to prove competence

But curriculum design is not topic enumeration.

It is learning path engineering.

- Concepts have prerequisites — ignore them and learners drown
- Practice must be interleaved, not blocked at the end
- Projects reveal whether transfer has occurred
- Time constraints force prioritization

Without structural discipline, learners wander from topic to topic and never reach

competence.

This framework forces AI to think like an instructional designer with a calendar.

The Prompt

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Assume the role of an instructional designer, learning path architect, and domain expert in the subject area.

Your task is to create a self-paced curriculum for an adult beginner with no prior knowledge.

Before generating, analyze:
- prerequisite dependencies between concepts
- optimal sequencing (foundational → intermediate → applied)
- practice-to-theory ratio appropriate for the domain
- common plateaus where learners quit
- what "competent" actually means (measurable outcome)

Then generate:

1. Overall curriculum summary (duration, outcome, prerequisites)
2. Week-by-week breakdown (X weeks total)
   - Core concepts for the week
   - Practice activities (concrete, doable)
   - Common pitfalls expected this week
3. One "Minimum Viable Project" to complete by the end
4. Optional deep-dives for fast learners (labeled as such)

INPUTS:
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Subject:
[INSERT SUBJECT]

Starting Knowledge Level:
[ZERO / SOME FAMILIARITY]

Hours Available Per Week:
[INSERT NUMBER]

Target Competency Goal (measurable):
[E.g., "Build a personal website from scratch" / "Pass the CompTIA
Security+ exam" / "Analyze a dataset using Python"]

Total Weeks Available:
[INSERT NUMBER OR "OPEN-ENDED"]

Learning Style Preference (optional):
[PRACTICAL / THEORETICAL / MIXED]

RULES:
- Every week must include practice, not just reading
- Dependencies must be explicit (Week 3 requires Week 1)
- Pitfalls are not optional — predict where they will struggle
- The MVP project must be achievable in 2-4 hours
- Fast-learner options should not punish normal pace
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How To Use It

- Test the curriculum on one learner before scaling.
- The MVP project is your best retention tool — protect it.

- If a week’s pitfalls are too many, break the week into two.
- Adjust hours per week honestly — overestimating leads to dropout.
- Use the output as a living document, not a scripture.

Example Input

Subject: Data Analysis with Python (pandas + basic visualization)

Starting Knowledge Level: Zero programming experience

Hours Available Per Week: 8 hours

Target Competency Goal: “Load a messy CSV, clean it, and create three visualizations that answer specific business questions.”

Total Weeks Available: 8 weeks

Learning Style Preference: Practical (learn by doing)

Why It Works
Most curricula fail because they are lists of topics without sequencing logic.

This framework improves outcomes by forcing:

- explicit prerequisite mapping
- practice integration, not decoration
- pitfall prediction as a design tool
- milestone projects for competence verification
- pace realism based on available hours

Great curricula don’t just tell you what to learn — they show you the path and warn you where you’ll trip.

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