

Your 1-Year AI Expert Learning Roadmap

This guide is designed for complete beginners who want to become AI experts within one year. It provides a structured path with hand-picked YouTube video resources, suggested study topics, and expert-level strategies.

1. Absolute Beginner

- Learn Python fundamentals
- Understand basic AI concepts

Videos:

- AI For Absolute Beginners:

<https://www.youtube.com/playlist?list=PLGs0VKk2DiYyXlBJVaE8y1qr24YldYNDm>

- Python for Beginners (FreeCodeCamp):

<https://www.youtube.com/watch?v=rfscVS0vtbw>

2. Beginner ML

- Understand ML fundamentals
- Train basic ML models

Videos:

- AI Full Course 2025:

<https://www.youtube.com/watch?v=uXNCfOivvNg>

- GenAI Essentials - Google Cloud:

<https://www.youtube.com/watch?v=nJ25yl34Uqw>

3. Intermediate

- Master data handling, model evaluation
- Understand deep learning principles

Videos:

- AI Engineer Roadmap 2025:

<https://www.youtube.com/watch?v=7MfBlmAomeM>

- Self-Study AI Roadmap:

<https://www.youtube.com/watch?v=nznFtfgP2ks>

4. Advanced Foundations

- Learn neural networks deeply
- Get strong at AI math (calculus, linear algebra, stats)

Videos:

- Dive Into Deep Learning:

<https://d2l.ai/>

- StatQuest with Josh Starmer:

<https://www.youtube.com/user/joshstarmer>

5. Expert Level

- Train/fine-tune LLMs
- Build AI agents, multimodal models

Videos:

- Generative AI Full Series:

<https://www.youtube.com/watch?v=k7HaeJs-N-o>

- Hugging Face Transformers Course:

<https://www.youtube.com/watch?v=6F1y0oP1-wI>

Final Tips

- Watch actively: pause, take notes, and code along.
- Build real projects and share on GitHub.
- Read papers from arXiv when you're confident.
- Stick to the plan for at least 1 hour daily.
- Join communities (Reddit, Discord, Kaggle).