

■ Setup Guide: Intro to Generative AI Environment

Step 1: Create Course Folder

Open Anaconda Prompt (or terminal) and run:

```
cd Desktop # or Documents (any location)
mkdir intro-to-genai
cd intro-to-genai
```

Step 2: Create requirements.txt

Inside intro-to-genai folder, create a file called requirements.txt and paste:

```
# Core LangChain
langchain
langchain-core
langchain-community
langchain-openai
langchain-anthropic
langchain-google-genai
```

```
# Vector DBs
faiss-cpu
chromadb
pinecone-client
```

```
# Hugging Face
transformers
huggingface_hub
```

```
# Deep Learning (CPU safe)
torch
torchvision
tensorflow
```

```
# Web/API tools
flask
streamlit
```

```
# Data & Utils
numpy
pandas
scikit-learn
matplotlib
seaborn
python-dotenv
```

```
# Jupyter support
ipykernel
```

Step 3: Create Conda Environment

```
conda create -n genai python=3.10 -y
conda activate genai
```

Step 4: Install Requirements

```
pip install -r requirements.txt
```

Step 5: Register Jupyter Kernel

```
python -m ipykernel install --user --name=genai --display-name "Python (genai)"
```

Step 6: Open VS Code

```
code .
```

Now open any .ipynb notebook and select the kernel → Python (genai).