

# ■ AI/ML 4-Year Roadmap (Hinglish Version) for MGM CET CSE Student

## ■ Year 1 – Foundation Banani Hai

### **Goal: Programming basics, Maths, AI ka intro**

- Python Basics → freeCodeCamp Python Course
- C Programming (college syllabus ke sath)
- Maths for AI → Khan Academy Linear Algebra, Probability
- AI Intro → NPTEL ML Introduction
- Mini Projects: Calculator, To-Do app, CSV Data Analysis
- Tip: GitHub pe projects upload karna shuru karo

## ■ Year 2 – Core ML Skills

### **Goal: Machine Learning algorithms aur data handling**

- ML Basics → freeCodeCamp ML with Python
- Tools: NumPy, Pandas, Matplotlib, Seaborn, Scikit-learn
- Kaggle Datasets → Titanic, Iris
- Projects: Spam Classifier, Movie Recommendation System
- Internship Apply → Internshala, Alcrowd

## ■ Year 3 – Advanced AI/ML

### **Goal: Deep learning aur specialization**

- Deep Learning → 3Blue1Brown Neural Networks
- Framework: TensorFlow ya PyTorch (choose one)
- Specialization: Computer Vision → OpenCV, YOLO | NLP → Hugging Face
- Projects: Image Classifier, Chatbot
- Hackathons: Smart India Hackathon, Kaggle Competitions

## ■ Year 4 – Job Prep & Portfolio

### **Goal: Final projects, placements**

- Advanced Projects: AI Image Search, Sentiment Analysis
- DSA Prep → LeetCode, GFG
- Apply for ML Engineer, Data Scientist, CV/NLP Engineer
- Final Year Project: Real-world AI solution (healthcare, finance, etc.)

## ■ Extra Tips (Low-Tier College me standout hone ke liye)

- GitHub portfolio strong banao – har saal kam se kam 5 projects
- LinkedIn pe active raho aur AI community join karo
- Har saal ek hackathon me participate karo
- Free certifications lo (Google AI, AWS Free Tier)