

AI – Powered Automation & Chatbot Development Internship

(15 Days | Practical-Oriented | Industry Ready)

INTERNSHIP SYLLABUS

Internship Objectives

By the end of this internship, students will be able to:

- Understand **AI automation workflows**
- Build **rule-based & AI-powered chatbots**
- Integrate **APIs, databases & AI models**
- Automate tasks using **Python & AI tools**
- Deploy chatbots for **web & WhatsApp-style interfaces**
- Design **real-time mini & final projects**

DAY 1 – Introduction to AI Automation & Chatbots

- What is AI-Powered Automation?
- Chatbots: Rule-Based vs AI-Based
- Use cases: Business, Education, Customer Support

Practical

- Install Python, VS Code
- Environment setup
- First automation script (Auto-email / Auto-message)

Outcome:

Clear understanding of automation concepts

DAY 2 – Python Basics for Automation

- Python syntax
- Variables, loops, conditions
- Functions

Practical

Auto file organizer

Auto message sender (simulation)

DAY 3 – Advanced Python for Automation

- Working with files
- OS & system automation
- Scheduling tasks

Practical

Auto report generator

Task scheduler automation

DAY 4 – Introduction to Chatbot Development

- Chatbot architecture
- NLP basics
- Intent & response mapping

Practical

Create first rule-based chatbot (console)

DAY 5 – NLP Basics for Chatbots

- Tokenization
- Stemming & Lemmatization
- Text classification

Practical

Text preprocessing

Simple intent classifier

DAY 6 – AI Chatbot Using Python

- AI chatbot flow
- Training data concepts

Practical

Build AI chatbot using Python libraries

Intent-based response bot

DAY 7 – Using AI APIs (OpenAI / Alternatives)

- AI APIs overview
- Prompt engineering basics

Practical

Build GPT-style chatbot

AI Q&A system

DAY 8 – Automation + Chatbot Integration

- Chatbot-triggered automation
- Workflow automation

Practical

Sends email

Fetches data

Triggers tasks

DAY 9 – Database Integration

- Why databases for chatbots?
- User history & logs

Practical

Connect chatbot with database

Store chat history

DAY 10 – Web-Based Chatbot (Frontend + Backend)

- Web chatbot architecture
- API concepts

Practical

Create web chatbot UI

Backend chatbot API

DAY 11 – WhatsApp-Style Chatbot Simulation

- Messaging chatbot flow
- Business chatbot use cases

Practical

Build WhatsApp-style chatbot UI

Automated responses

DAY 12 – AI Automation Project Planning

- Project idea finalization
- Real-world problem analysis

Practical

AI Customer Support Bot

AI Attendance Bot

AI Automation Assistant

DAY 13 – Mini Project Development

Practical

- Build complete mini project
- AI + Automation integration

Trainer Guidance

- Code review
- Error fixing
- Optimization



DAY 14 – Final Project Development

Practical

Advanced features

UI enhancement

Testing

DAY 15 – Deployment & Presentation

- Deployment basics
- Project documentation

Practical

Project demo

Resume & interview guidance

Internship assessment

