■ Full Stack + AI Business Website Learning Roadmap

1■■ Frontend (UI / Design / Animation)

• JavaScript (ES6+) – modern syntax, async/await, fetch

• React.js – component-based frontend library

• Next.js (v14) – professional framework (SEO + speed + API routes)

• Tailwind CSS – responsive, utility-first styling

• Framer Motion – smooth animations & transitions

• GSAP (optional) – advanced 3D-like scroll animations

• ■ Time: 1–1.5 months

2■■ Backend + Database

• Node.js + Express.js – backend logic

• MongoDB + Mongoose – NoSQL database

• APIs (REST + GraphQL basics) – data communication

• Authentication (JWT / Supabase / Firebase) – login & security

• ■ Time: 1 month

3■■ Deployment & DevOps Basics

• Git & GitHub – version control

• Vercel / Render / Netlify – hosting

• MongoDB Atlas / Supabase – cloud DB setup

• Environment Variables – secure key management

• Domain Connection – GoDaddy / Namecheap

• ■ Time: 2 weeks

4■■ AI Integration (Prototype Generator / Tools)

• OpenAI API (GPT, DALL·E, etc.)

• LangChain – AI workflow framework

• Prompt Engineering – smart output design

• Python or Node-based AI APIs integration

• Data Handling + Storage (Firebase / MongoDB)

• ■ Time: 1–2 months

5■■ Payments & Automation

• Stripe / Razorpay API – payments

• Nodemailer / Twilio – client communication

• Zapier / n8n – workflow automation

• ■ Time: 2–3 weeks

6■■ Soft Skills & Tools

• Figma – UI/UX design mockups

• Canva / Framer – visuals & branding

• Basic SEO + Google Analytics

• Notion / Trello – project planning & management

■ Learning Timeline Summary

Phase	Focus	Duration
Frontend	Design + UI	1.5 months
Backend	Logic + APIs	1 month
Deployment	Hosting + Domain	0.5 month
AI Integration	Core product	1.5 months
Automation	Payments + Workflows	0.5 month

■ By following this roadmap (4–6 months), you'll be able to build a complete AI-integrated, scalable business website.