

SEO MAGICS

SM TECH ACADEMY

Full-Stack Developer Syllabus (4 Months)

Month 1 – Python & Web Fundamentals

Week 1: Python Basics – Variables, Data Types, Operators, Conditions, Loops

Week 2: Functions & Data Structures – Functions, Lambda, Lists, Tuples, Sets, Dicts

Week 3: OOP & File Handling – Classes, Inheritance, Exceptions, File Handling

Week 4: Web Fundamentals – HTML, CSS, Bootstrap/Tailwind, Portfolio Mini Project

Month 2 – Frontend & JavaScript

Week 5: JavaScript Basics – Variables, Functions, Loops, DOM Manipulation

Week 6: Advanced JavaScript – ES6, Fetch API, Form Validations, Weather App

Week 7: Frontend Integration – Modules, LocalStorage, To-Do App

Week 8: React Basics – Components, Props, State, Hooks, React Task Tracker

Month 3 – Backend with Python (Flask/Django)

Week 9: Flask Basics – Setup, Routing, Templates, Forms

Week 10: Flask Advanced – CRUD, REST API, JWT Auth, Blog Website

Week 11: Django Basics – MVT, Models, Views, Templates, Admin Panel

Week 12: Django Advanced – Authentication, ORM, File Uploads, E-Commerce App

Month 4 – Databases, Deployment & Capstone Projects

Week 13: Databases – SQL, MySQL/PostgreSQL, MongoDB, Django ORM

Week 14: Deployment – Hosting, Docker, Gunicorn, Nginx, CI/CD

Week 15: Capstone Project – Planning & Development

Week 16: Capstone Project – Completion, Deployment, Presentation

Outcomes After 4 Months

✓ Build Full-Stack Applications (Python Flask/Django + React/JS)

✓ Work with SQL & NoSQL Databases

✓ Deploy to cloud servers (Heroku/AWS/DigitalOcean)

✓ 2 Mini Projects + 1 Capstone Project

✓ Job-Ready for Full-Stack Developer Roles