

90-Day Software Development Training & Internship Syllabus

Price – 10,000.00

Phase 1: Core Training (Day 1–30)

Week 1: Programming Fundamentals

- **Basics of programming (using Python/Java/C++)**
- **Variables, data types, operators**
- **Conditional statements, loops**
- **Functions and error handling**

Week 2: Object-Oriented Programming (OOP)

- **Classes and objects**
- **Inheritance, encapsulation, polymorphism**
- **Constructors, method overloading**
- **OOP in a chosen language (e.g., Python/Java)**

Week 3: Data Structures & Algorithms

- **Arrays, Linked Lists, Stacks, Queues**
- **Sorting and searching algorithms**
- **Time and space complexity (Big-O notation)**
- **Recursion and problem-solving**

Week 4: Version Control & IDEs

- **Git & GitHub basics**
- **Branching, merging, pull requests**
- **Code editors and IDEs (VS Code, IntelliJ, etc.)**
- **Writing clean and readable code**

Phase 2: Web Development & Tools (Day 31–60)

Week 5: Front-End Development

- **HTML5, CSS3, JavaScript**
- **Responsive design with Flexbox/Grid**

- *JavaScript DOM, events*
- *Frameworks (Basics of React.js or Vue.js)*

Week 6: Back-End Development

- *Server-side programming with Node.js / Python (Django or Flask) / PHP*
- *Working with databases (MySQL, PostgreSQL, or MongoDB)*
- *REST APIs – Create, Read, Update, Delete (CRUD)*
- *Authentication and authorization (JWT, OAuth basics)*

Week 7: Software Development Lifecycle (SDLC)

- *SDLC phases: Requirements, Design, Development, Testing, Deployment*
- *Agile and Scrum methodology*
- *Software testing basics (unit, integration)*
- *CI/CD fundamentals*

Week 8: Tools & Deployment

- *Docker basics (containers and images)*
- *Cloud deployment (Heroku, Vercel, or AWS basics)*
- *Postman for API testing*
- *Project documentation and teamwork using tools like Jira, Trello*

Phase 3: Internship / Live Project (Day 61–90)

Weeks 9–13: Capstone Project

- *Full-stack development project (individually or in teams)*
- *Project planning and task breakdown*
- *Weekly sprint reviews and mentor feedback*
- *Version control with Git (feature branches, pull requests)*

Final Week:

- *Final project presentation/demo*
- *Code walkthrough and deployment*
- *Resume building + GitHub portfolio setup*

- ***Technical & HR mock interviews***
- ***Certification of completion***