



# SOMAKODI

## BROCHURE

### Applied AI & Full-Stack Development

Today, technology is driven by intelligent systems and scalable web applications from AI-powered services and automation tools to full-stack platforms that support modern businesses. As organizations continue to transform digitally, the demand for developers who can build applications and integrate practical AI solutions has never been higher.

The Applied AI & Full-Stack Development program introduces learners to the core foundations of programming, web development, and modern AI integration. Starting from beginner-friendly concepts, the curriculum gradually progresses into advanced full-stack engineering and real-world AI applications.

Every module emphasizes hands-on, industry-aligned experience from building interactive UIs and designing backend services to integrating AI models, automating workflows, and deploying complete applications to the cloud.

By the end of the course, you will have mastered essential skills in both applied AI and full-stack development, including JavaScript, React, Node.js, databases, API design, AI model integration, automation tools, and cloud deployment, fully preparing you to build intelligent, scalable, and production-ready software solutions.

## PREREQUISITES

This is a beginner-friendly program with no prerequisites, although many students have engaged in self-learning previously or have worked at tech startups or in tech-adjacent roles. Whether you're new to the field or you're looking to formalize your practice, our curriculum helps you become fluent in the languages, frameworks, and libraries that modern employers demand and put them to work.

## Why learn Software Engineering

### 1. High Demand Career

The tech industry is growing rapidly, and software engineers are in high demand across all sectors, including finance, healthcare, education, entertainment, etc. This demand translates to excellent job security, competitive salaries, and global career opportunities.

### 3. Flexibility and Remote Work

Many software engineering roles offer the option to work remotely or freelance, giving you control over your schedule and location.

The skills are also globally applicable, allowing you to work for companies anywhere in the world.

### 5. Entrepreneurial Potential

With coding skills, you can launch your own apps or tech businesses with relatively low startup costs. Many successful tech startups started with just one or two software engineers.

### 2. Problem-Solving and Innovation

Software engineering teaches you how to think logically and solve complex problems.

You get the chance to build solutions that can improve lives and transform industries.

### 4. Versatile and Evolving Career Paths

You can specialize in areas like web development, mobile apps, data science, artificial intelligence, cybersecurity, and more. It also opens doors to roles in product management, entrepreneurship, and tech consulting.

### 6. Creativity and Real-World Impact

Learning coding combines problem-solving, designing, and innovation. You get to create, test, and iterate like building with digital LEGO. You will enjoy bringing great ideas to life.

## Why Study at Somakodi SChool

Somakodi is one of the most successful tech boot camps in Kenya. Join us and get top-tier learning & student experience.



Professional and experienced team



Practical hands-on learning



Enhanced digital-first learning



Financial Aid Opportunities



Immersive Curriculum



Job placement support

## Who is this course for?

A software engineering course is suitable for a wide range of people, not just those who already know how to code. It fits anyone who wants to build, design, or work with software systems.

- **Beginners with an interest in Tech.** You are curious about how websites, apps, and systems work, you don't need a strong math or coding background, just your interest and willingness to learn.
- **Career Switchers.** You have a background in finance, teaching, marketing, hospitality, etc., and are you looking to transition into tech for increased earnings, remote work opportunities, and more flexible careers
- **Individuals who are problem-solvers & critical thinkers** and enjoy solving puzzles, building things and logical thinking. If you enjoy structured problem-solving, software engineering will feel natural.
- **Professionals seeking high-demand, high-pay skills, stable employment, job security, International opportunities, freelancing, or remote work.** Tech talent is in demand globally.
- **Entrepreneurs, anyone planning to build or manage a tech startup.** Understanding how software works helps you lead teams, make better decisions, and avoid costly mistakes.

## What are the requirements for learners?

- Have Basic computer skills
- Desire and curiosity to learn.
- Have a Desktop computer or Laptop with stable internet access.

## Software Engineering Course Overview

|                     |   |                              |
|---------------------|---|------------------------------|
| • Class Timings     | : | Flexible Schedule            |
| • Program Fees      | : | Kes. 75,000/=                |
| • Course Model      | : | Live classes and 100% Online |
| • Learning Duration | : | 8 - Months                   |
| • Classes Schedule  | : | Monday - Friday              |

## Teaching Method (Somakodi Classroom)

- Daily hands-on code sessions with tutor
- Assignment/Practice tasks after each lesson
- Weekly quizzes & mini-projects
- Mentorship from tutors
- End of Unit Project presentations

**Throughout this expert-designed program, you'll:**

- Learn to write clean, efficient code, solve practical problems, and build confidence using essential development tools and techniques.
- Master front-end web development with HTML, CSS, JavaScript, and responsive design, enabling you to create modern and interactive user interfaces.
- Develop strong back-end skills, including server-side programming, API development, authentication, and understanding how application logic operates behind the scenes.
- Study database design and management, using SQL to create tables, write queries, and connect applications to real, secure data systems.
- Gain hands-on experience with Git and GitHub, learning to manage code versions, collaborate effectively, and work like a professional developer.
- Explore core software engineering principles such as the software development life cycle, Agile methodologies, documentation, and industry best practices.
- Learn how to deploy applications on modern hosting platforms while developing essential career skills—including problem-solving, teamwork, and interview readiness.

## CURRICULUM OVERVIEW

### Modern Web Development Foundations Enhanced with AI

This module establishes core front-end and back-end skills while introducing learners to how AI accelerates learning, coding, debugging, and idea exploration.

- HTML, CSS & JS with AI Assistance
- JavaScript ES6+ & AI Code Generation
- AI in the Developer Workflow

### AI-Enhanced Front-End Engineering with React & Tailwind

Learners build modern interfaces while using AI to automate repetitive tasks, design patterns, and UI logic.

- React Components with AI Support
- AI-Assisted UI/UX Design
- AI-Automated Documentation & Comments

## Smart Back-End Development with Node.js, Express & AI Integration

Back-end development becomes more efficient and intelligent through model-driven logic, automated code generation, and AI-powered utilities.

- Building APIs with AI Assistance
- Intelligent Server Logic
- AI-Driven Authentication Support

## Databases, Data Modeling & AI-Assisted Data Handling

This module blends traditional database knowledge with AI-driven approaches to data modeling, analysis, and query writing.

- AI for SQL & MongoDB Query Generation
- AI-Assisted Schema Design
- Data Cleaning & Preprocessing

## Deep Integration of AI Models into Web Applications

This is where core AI development happens—turning traditional full-stack apps into intelligent, user-aware systems.

- How AI Models Work
- AI API Integration
- Building AI-Powered User Experiences

## Full AI Application Architecture, Agents & Workflow Automation

This module teaches learners how to chain AI models with logic, memory, and external tools to create powerful, semi-autonomous systems.

- AI Agent Workflows
- AI + Back-End Chaining
- Business Automation with AI

## Deploying Production-Ready Full Stack AI Systems

Finish by deploying AI-powered applications to real cloud environments while mastering industry best practices for reliability, efficiency, and security.

- Hosting AI Applications
- Optimizing AI Workloads
- Monitoring, Logging & Observability
- Scaling AI Features



# SOMAKODI SCHOOL ADMISSION

## WHERE LEARNING COMES TO LIFE!

A hub of academic excellence, creativity, and personal growth! We invite prospective students and families to embark on an exciting educational journey with us.

### Why Choose Somakodi School?

- Academic Excellence
- Inclusive Community
- Holistic Development
- State-of-the-Art Facilities

Join Somakodi School and let your educational journey begin

### What are the benefits of online learning?

- Flexibility and Convenience
- Personalized Learning Experience
- Develop Self-Discipline and Tech Skills
- Cost-Effective