



FULL-STACK SOFTWARE DEVELOPMENT

Professional Short Course - Student Program Guide

Build Skills. Build Projects. Build Your Career.

DURATION	6 MONTHS
START DATE	1 NOVEMBER 2026
INTAKE	2026/2027
MODE	IN-PERSON PRACTICAL LABS
TRAINING FEE	600,000 RWF
PAYMENT PLAN	100,000 RWF × 6 MONTHS
LOCATION	KICUKIRO–NIBOYE, KIGALI, RWANDA
SESSIONS	MON–FRI MORNING / EVENING • SAT–SUN FULL DAY

01 | WELCOME TO GIZA

Learn the concepts. Apply them. Build with them.

The technology industry is changing rapidly. Employers increasingly need people who can do more than understand programming concepts—they need people who can build, test, deploy, troubleshoot and continuously improve real software applications.

GIZA Institute was established with this practical need in mind. The Full-Stack Software Development program combines technical knowledge with continuous practical application so learners progressively develop the ability to build.

ABOUT GIZA INSTITUTE

GIZA Institute is a professional training institution committed to developing skilled, adaptable and future-ready professionals. Its programs are designed with a strong practical focus, aligning academic knowledge with real industry needs.

OUR MISSION

To deliver practical, industry-aligned education that equips learners with real skills, critical thinking and professional discipline required to succeed in today's and tomorrow's job markets.

THE GIZA APPROACH

- Hands-on technical practice rather than theory alone.
- Project-based learning that turns concepts into working applications.
- Modern development tools and workflows used throughout the learning journey.
- Problem-solving as a core part of technical development.
- Portfolio development so students have evidence of practical work.
- Professional and career readiness alongside technical development.

At GIZA, the objective is not simply to complete a course. The objective is to develop the ability to build.

02 | THE PROGRAM

Full-Stack Software Development

A six-month practical training program designed for learners who want to develop strong, industry-relevant software development skills.

PROGRAM	Full-Stack Software Development
DURATION	6 Months
START DATE	1 November 2026
TRAINING MODE	In-Person Practical Labs
COURSE TYPE	Certified Professional Short Course
LOCATION	Kicukiro–Niboye, Kigali, Rwanda
TRAINING FEE	600,000 RWF
INSTALLMENT PLAN	100,000 RWF per month × 6 months
SESSIONS	Monday–Friday morning/evening; Saturday–Sunday full day

WHY FULL-STACK SOFTWARE DEVELOPMENT?

Modern software products are rarely built by people who understand only one isolated technology. A professional developer needs to understand how different parts of a system work together.

User Interface → Application Logic → APIs → Databases → Testing → Deployment

A full-stack perspective helps a developer participate in the development of complete applications rather than working with only one small part of a system. Through this program, learners progressively develop these skills and apply them through practical projects.

03 | WHAT YOU WILL LEARN

17 core modules across four development phases

This is the actual module structure for the program. It replaces the earlier high-level month-by-month curriculum with the concrete subjects learners will cover.

PHASE 1 - FOUNDATIONS

1. Walkthrough of the Curriculum
2. SDLC and Agile Delivery
3. Git, Collaboration and Developer Workflow
4. System Architecture Fundamentals
5. TypeScript Foundations

PHASE 2 - FRONTEND (REACT)

6. React Fundamentals
7. React Components, Props and Rendering Logic
8. React Hooks and User Interaction
9. Managing State in React
10. React API Integration and Project Structure
11. React Escape Hatches and Production Readiness

PHASE 3 - BACKEND & APIS

12. Backend Engineering and API Development
13. Authentication, Authorisation and Security

PHASE 4 - DATA, INFRASTRUCTURE & DEPLOYMENT

14. Databases and Data Storage Choices
15. Linux Foundations for Developers
16. Web Servers, Hosting and Deployment
17. Docker, CI/CD and Production Readiness

Learning progression: foundations → React frontend → backend and APIs → data, infrastructure, deployment and production readiness.

04 | HOW YOU WILL LEARN

Practice is part of the curriculum.

GIZA Institute uses a Competency-Based Learning Model with an emphasis on hands-on practice and continuous project work. Students are expected to progressively apply what they learn.

OUR LEARNING APPROACH

LEARN → PRACTICE → BUILD → TEST → IMPROVE → PRESENT

- Instructor-led sessions - Understand concepts, methods and development principles with structured guidance.
- Guided practical exercises - Apply concepts through technical exercises and supervised practice.
- Individual practice - Develop the ability to work through technical problems independently.
- Project-based assignments - Use newly learned skills to create functional software components.
- Progressive software projects - Move from smaller tasks toward increasingly complete applications.
- Problem-solving activities - Analyse requirements, find solutions and improve implementations.
- Capstone development - Bring skills from the full program together in a final practical solution.
- Professional development - Strengthen presentation, discipline, communication and career readiness.

WHAT THIS MEANS FOR YOU

You are not expected to become a professional developer simply by listening to lessons. You will be expected to practise, build, make mistakes, solve problems, test your work and improve it. That is why projects and practical activities are central to the program.

05 | PROJECTS & CAPSTONE

You will build-not only study.

Projects are a central part of the GIZA learning approach. Throughout the program, students progressively apply what they learn through practical work and move toward a final Capstone Project.

YOUR CAPSTONE CAN INCLUDE

- Identifying a practical problem worth solving.
- Designing a software solution around the problem.
- Developing the application and its core functionality.
- Working with databases and APIs.
- Applying software testing practices.
- Presenting the completed solution.
- Demonstrating the technical capabilities developed during training.

THE PURPOSE OF THE CAPSTONE

The objective is to finish the program with evidence of practical work, not just classroom attendance. Your final project should demonstrate how you can take a problem, apply technical knowledge, develop a solution and communicate what you built.

YOUR SIX-MONTH JOURNEY

01 - FOUNDATION	Development foundations, SDLC, Git, architecture and TypeScript.
02 - BUILD	Frontend engineering with React.
03 - CONNECT	Backend engineering, APIs, authentication and security.
04 - DATA	Databases and data storage choices.
05 - DEPLOY & TEST	Linux, web servers, hosting, deployment and production practices.
06 - CREATE & PRESENT	Capstone development and professional readiness.

Final destination: Practical Skills + Projects + Portfolio + Professional Readiness

06 | WHAT YOU WILL GAIN

Finish with something you can demonstrate.

By completing the program successfully, you will develop exposure and practical experience across major stages of modern software development, supported by practical projects and portfolio work.

TECHNICAL SKILLS	Frontend development; backend engineering; API development; databases; Linux; web servers; hosting and deployment; Docker and CI/CD; authentication and security.
PRACTICAL SKILLS	Building software applications; connecting application components; testing and improving applications; developing projects from requirements to implementation.
PROFESSIONAL SKILLS	Problem-solving; project presentation; professional discipline; collaboration; career readiness; practical experience.

YOUR PORTFOLIO MATTERS

Instead of completing six months of training with only notes and theoretical exercises, students will work progressively toward practical software projects. Your projects can become evidence of your technical abilities, problem-solving approach, development experience and ability to build functional applications.

07 | WHO SHOULD APPLY?

The program is for people ready to develop.

The program is designed for learners with a technical interest or foundation who want to develop practical software development capabilities. It is not limited to absolute beginners; it can also support learners and professionals who want structured, practical development experience.

TECH-RELATED GRADUATES	HIGH-SCHOOL	Including graduates from Software Development (SOD) and related technical backgrounds.
COLLEGE & UNIVERSITY STUDENTS		Particularly students studying Computer Programming, Software Development, ICT, Computer Science, Information Technology and related fields.
COLLEGE & UNIVERSITY GRADUATES		Those who want to strengthen their practical software development capabilities.
IT & TECHNOLOGY PROFESSIONALS		Professionals who want to upgrade their software development skills or gain structured practical experience.
TECHNICAL LEARNERS		Learners who already have some technical foundation and want practical, structured and certified training.

WHAT YOU NEED

- Laptop: access to a computer capable of running modern development tools. Published minimum recommendation: 8 GB RAM with Intel Core i5 or higher.
- Reliable internet access outside training hours is recommended.

- Notebook or digital note-taking system.
- USB/external or cloud storage for project backups.
- Commitment to completing projects and assignments.

08 | TRAINING ARRANGEMENTS

Flexible session options

GIZA provides flexible session options to accommodate different learner schedules. Students should confirm their selected session and final timetable with GIZA during the application/admission process.

MONDAY–FRIDAY - MORNING	08:00 – 11:00
MONDAY–FRIDAY - EVENING	18:00 – 21:00
SATURDAY–SUNDAY - FULL DAY	08:00 – 14:30, with a 30-minute break

LEARNING ENVIRONMENT

- Training is delivered through in-person practical labs.
- GIZA initially operates with one classroom for the program.
- Trainers and trainees bring their computers/laptops for development work.
- GIZA provides internet within the training environment.
- The learning environment includes one projector and one 75-inch display screen.
- Government public holidays and approved institutional breaks should be respected in the academic calendar.

Students should plan their time beyond class for practice, assignments and project work. The scheduled session is the structured learning period; your development continues outside the classroom.

09 | ASSESSMENT & CERTIFICATION

Your progress should be visible.

A practical program requires practical assessment. Student progress should be demonstrated through a combination of learning activities, practical exercises, assignments and projects.

ASSESSMENT MAY INCLUDE

- | | |
|---|---|
| <ul style="list-style-type: none"> • Practical exercises • Assignments • Project work • Technical tasks | <ul style="list-style-type: none"> • Tests • Capstone project • Project presentation |
|---|---|

CERTIFICATION

The program is presented as a Certified Professional Short Course. Successful completion of the program will provide students with certification from GIZA Institute, subject to the institution's completion requirements.

Assessment arrangements and detailed completion requirements will be communicated in accordance with GIZA's approved academic and certification policy.

10 | FEES & PAYMENT

Know your investment before you begin.

The total training fee for the six-month Full-Stack Software Development Professional Short Course is:

600,000 RWF

TOTAL TRAINING FEE	600,000 RWF
MONTHLY INSTALLMENT	100,000 RWF per month
NUMBER OF INSTALLMENTS	6
FIRST INSTALLMENT	Required at application to book your seat.
PAYMENT CHANNEL	*182*1*2*21179315001#
ACCOUNT NAME	Giza Institute
BANK / NETWORK	I&M Bank
ACCOUNT NUMBER	21179315001

PAYMENT PROCESS

- Confirm the program and admission requirements with GIZA.
- Pay the first installment of 100,000 RWF at application to book your seat.
- Continue with the remaining 100,000 RWF monthly installments across the six-month program.
- Keep your payment confirmation/receipt for your records.
- Confirm any institutionally communicated payment deadlines or administrative conditions with GIZA.

Seats are limited. Application and payment should be completed according to the admission instructions provided by GIZA.

11 | ADMISSION & APPLICATION

From application to your first class.

01 - APPLY	Submit your application to GIZA Institute.
02 - APPLICATION REVIEW	GIZA reviews your application and background.
03 - ADMISSION	Successful applicants receive admission information and instructions.
04 - BOOK YOUR SEAT	Pay the first 100,000 RWF installment at application to confirm your place.
05 - BEGIN TRAINING	Join your selected training session and begin the six-month practical learning journey on 1 November 2026.

APPLICATION INFORMATION

2026/2027 intake - Applications are currently open. Applicants should select their preferred session during the application/admission process and confirm the final timetable with GIZA.

You do not need to know everything before you start. You need the willingness to learn, practise, build and improve.

12 | INDUSTRY & ECOSYSTEM

Learning should connect to the world outside the classroom.

GIZA Institute believes practical technical education becomes stronger when learners are connected to the wider technology, innovation and industry ecosystem.

EXPOSURE MAY INCLUDE

Industry professionals • Technical communities • Innovation activities • Mentorship • Real-world projects • Entrepreneurship • Professional networks • Technology events.

Partnership activities may create additional learning, mentorship, professional exposure, innovation and networking opportunities. Specific partner benefits or activities are communicated when formally established.

13 | YOUR COMMITMENT & CONTACT

GIZA provides the environment. You provide the commitment.

Joining a practical software development program is a commitment. You should be prepared to attend consistently, practise regularly, complete assignments, participate in practical activities, work on projects, ask questions, solve problems, learn from mistakes, collaborate with other learners and take responsibility for your progress.

START BUILDING YOUR FUTURE

Technology careers are built through skills, practice and continuous learning. At GIZA Institute, our goal is to provide the environment, structure and practical training needed to help you develop those capabilities.

BUILD SKILLS. BUILD PROJECTS. BUILD YOUR CAREER.

LOCATION	Kicukiro–Niboye, Kigali, Rwanda
PHONE / WHATSAPP	+250 792 873 949 / +250 785289586
EMAIL	info@giza.rw
WEBSITE	giza.rw
INTAKE	2026/2027 - Applications currently open

For application, payment, timetable and admission clarification, contact GIZA Institute directly.