STUDENTS INDUSTRIAL WORK EXPERIENCE SCHEME

SIWES

ROLASOFT PROFESSIONAL COMPUTER & IT COURSES VERSION 2.O LATEST

SIWES Diploma in Big Data

Become a job-ready Big Data in 3-6 months!

Benefits of Studying with RolaSoft

✅ **1. Industry-Relevant Curriculum**

Stay ahead with a syllabus designed by industry experts, focused on real-world big data.

✅ **2. Hands-On Training**

Learn by doing — build real-time projects, full-scale big data.

✅ **3. Experienced Instructors**

Gain insights from certified professionals and senior certified ethical hacker with years of teaching and industry experience.

✅ **4. Placement Assistance**

Access job support services including resume building, mock interviews, and direct placement opportunities with partner companies.

✅ **5. Flexible Learning Modes**

Choose between: **Online**, **Offline (at our center)**, or **Hybrid Classes**

Benefits of Studying with RolaSoft

✅ **6. Mini & Major Projects**

Work on individual and group projects to strengthen your portfolio and impress future employers.

✅ **7. Certification Upon Completion**

Earn a **Diploma Certificate** from **RolaSoft Technologies**, recognized by IT recruiters and employers.

✅ **8. Small Batch Size**

Personalized attention and better interaction in small groups for an enhanced learning experience.

✅ **9. Affordable Fees & Installment Plans**

Top-tier training at a reasonable cost, with flexible payment options.

✅ **10. Career-Oriented Skills You'll Gain at RolaSoft Technologies**

RolaSoft ensures you're job-ready with the right tech stack and practical knowledge.

SIWES Overview

SIWES (Student Industrial Work Experience Scheme) is a structured industrial training program designed for students in Nigerian tertiary institutions studying science, engineering, technology, and other professional courses. It is coordinated by the **Industrial Training Fund (ITF)** and serves as a bridge between academic knowledge and practical industry experience.

Typically conducted for a duration of **3–6 months**, SIWES places students in real work environments related to their field of study. During this period, they apply classroom theory to practical tasks and gain firsthand understanding of workplace expectations and professional practices.

Advantages of SIWES to Students

Advantages of SIWES to Students

Hands-On Experience: Provides real-world exposure and practical knowledge in the student's field.

Bridging the Skills Gap: Helps students connect academic theories with industry practices.

Career Readiness: Prepares students for post-graduate employment by developing technical and soft skills.

Professional Networking: Offers opportunities to build relationships with industry professionals.

Improved Employability: Enhances resumes/CVs with relevant work experience that employers value.

Understanding of Workplace Culture: Teaches students workplace ethics, teamwork, and communication.

Opportunity for Future Placement: Sometimes leads to job offers or future internships with the same organization.

SIWES Big Data Course Details

- ✅ **Duration**
  Three-Six (3-6) Months

- ✅ **Schedule**
  Weekdays / Weekends

- ✅ **Learning Modes**
  Online, Offline (at our center), or Hybrid Classes

- ✅ **Start Date**
  New batches start every month — enroll now!

- ✅ **Eligibility**
  No prior experience required

SIWES Big Data – Program Details

Program Overview

The **Big Data** course introduces students to the concepts, tools, and technologies used in storing, processing, and analyzing massive volumes of data. It focuses on real-world applications of big data in fields like finance, healthcare, retail, and social media.

Students learn about distributed computing, Hadoop ecosystem, NoSQL databases, and big data analytics using frameworks like Apache Spark.

SIWES Big Data - Target Audience & Prerequisites

Target Audience:

✅ Computer Science, IT, and Data Science students or professionals, especially for SIWES or internships students.

Prerequisites:

✅ Basic knowledge of programming (Java/Python), databases, and statistics

SIWES Big Data Course Curriculum

Module 1: Introduction to Big Data

- ✅ Definition and characteristics of Big Data (3Vs – Volume, Velocity, Variety)
- ✅ Importance and challenges of Big Data
- ✅ Applications and industry use cases

SIWES Big Data Course Curriculum

Module 2: Big Data Architecture

- ✅ Big Data lifecycle
- ✅ Components of a Big Data solution
- ✅ Distributed computing basics
- ✅ Introduction to Batch vs Real-time processing

SIWES Big Data Course Curriculum

Module 3: Hadoop Ecosystem

- ✅ Hadoop Distributed File System (HDFS)
- ✅ MapReduce programming model
- ✅ Hadoop YARN and cluster architecture
- ✅ Working with Hadoop commands and configuration

SIWES Big Data Course Curriculum

Module 4: NoSQL Databases

- ✅ Introduction to NoSQL databases
- ✅ Types: Key-value, Document, Column-family, Graph
- ✅ Working with MongoDB and Cassandra
- ✅ CRUD operations and indexing

SIWES Big Data Course Curriculum

Module 5: Data Ingestion and ETL Tools

- ✅ Data ingestion methods (batch, real-time)
- ✅ Tools: Apache Flume, Apache Sqoop, Apache NiFi
- ✅ Connecting RDBMS to Hadoop ecosystem
- ✅ Basic data integration with Kafka

SIWES Big Data Course Curriculum

Module 6: Apache Hive and Pig

- ✅ Hive architecture and query language (HiveQL)
- ✅ Data warehousing concepts with Hive
- ✅ Pig scripting for data transformation
- ✅ Comparing Hive and Pig

SIWES Big Data Course Curriculum

Module 7: Apache Spark for Big Data Processing

- ✅ Introduction to Apache Spark
- ✅ Spark RDDs, DataFrames, and Datasets
- ✅ PySpark basics (Spark with Python)
- ✅ Spark MLlib (Intro to ML in Spark)
- ✅ Spark Streaming for real-time processing

SIWES Big Data Course Curriculum

Module 8: Big Data Analytics and Visualization

- ✅ Overview of big data analytics
- ✅ Integration with BI tools (Tableau, Power BI)
- ✅ Data exploration and dashboard design
- ✅ Case studies: social media analytics, fraud detection, IoT data

SIWES Big Data Course Curriculum

Module 9: Cloud Platforms for Big Data

- ✅ Introduction to AWS, Azure, and Google Cloud Big Data services
- ✅ Hadoop/Spark on cloud
- ✅ BigQuery, Amazon EMR, Azure Synapse overview

SIWES Final Capstone Project (End of 3-6 Months)

Students will complete an **industry-level project**:

✅ End-to-end Big Data project using Hadoop or Spark. Data ingestion, processing, and visualization.

SIWES Big Data - Certification Obtain

After completion of the program, the student will be awarded with a certificate:

SIWES Diploma in Big Data

SIWES Big Data - Roles After Completion

Graduates of this course can pursue the following roles:

- ✅ **Big Data Engineer:** Designs and maintains scalable big data architectures and pipelines
- ✅ **Data Engineer:** Develops and optimizes data infrastructure and ETL processes
- ✅ **Data Analyst:** Analyzes large datasets to discover patterns and trends
- ✅ **Big Data Developer:** Writes code using Hadoop/Spark for data processing tasks
- ✅ **Hadoop Developer:** Specializes in developing applications within the Hadoop ecosystem
- ✅ **Spark Developer:** Implements real-time and batch processing systems using Apache Spark
- ✅ **Data Scientist (Big Data):** Applies statistical and machine learning models to massive datasets
- ✅ **Cloud Data Engineer:** Works with cloud-based Big Data platforms (AWS EMR, GCP BigQuery, etc.)
- ✅ **BI Analyst (Big Data):** Combines data analytics and visualization to support business decisions

Rolasoft Technologies Services

Rolasoft Technologies – Services Offered

✅ **SOFTWARE DEVELOPMENT COMPANY**
(MOBILE APPLICATION, WEB APPLICATION, DESKTOP APPLICATION, CUSTOMIZED APPLICATION, E-COMMERCE WEBSITE)

✅ **PROFESSIONAL COMPUTER AND IT EDUCATION**
(TOP-UP PROGRAMS, DIPLOMA PROGRAMS, CERTIFICATE PROGRAMS, TECH @ SCHOOL, CORPORATE PROGRAMS, SIWES PROGRAMS, CUSTOMIZED PROGRAMS)

✅ **DIGITAL ADVERTISING AND BUSINESS BRANDING**
(SOCIAL MEDIA MARKETING, EMAIL MARKETING, CONTENT MARKETING, WEBSITE SEO, BRANDED CLOTHING, STICKERS AND TAG, CUSTOM BRANDING, AND MANY MORE)

✅ **INTERNATIONAL UNIVERSITY ADMISSION PROCESSING**
(AMERICA, UK, CANADA, EUROPE, AFRICA, AND MANY MORE)

Contact & Registration

 Phone: +234 8032867212, +234 8082171242

 Email: info@rolasofttech.com

 Website: www.rolasofttech.com

 Address: 2, Martins Street Off Ojuelegba Road, Yaba, Lagos State.

Enroll Today & Start Your Big Data Journey!

Shape your future with SIWES Big Data