**A REPORT ON**

**STUDENTS INDUSTRIAL WORK EXPERIENCE SCHEME (SIWES)**

**UNDERTAKEN AT**

**SHABEEB INTERGRATED SERVICE LIMITED**
**NO. 205, EJIGBO ROAD, OPPOSITE MAM MORTO PARK OFFICE, LATICO JUNCTION, IWO, OSUN STATE**

**FROM**
**OCTOBER, 2024 – DECEMBER, 2024**

**BY**


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**SUBMITTED TO**

**THE DEPARTMENT OF BUILDING TECHNOLOGY,**
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**IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THEAWARDOF NATIONAL DIPLOMA (ND) IN BUILDING TECHNOLOGY.**

**AUGUST-DECEMBER, 2025**

## DEDICATION

I dedicate this Students Industrial Work Experience Scheme (SIWES) report to God almighty for his grace and mercy towards the completion of the SIWES programme.

## ACKNOWLEDGEMENT

My acknowledgement goes to God almighty, my parents, Kwara State Polytechnic, Ilorin, my supervisors at Abbey International Technical Services.

## REPORT OVERVIEW

This is an industrial attachment report for the Students' Industrial Work Experience (SIWES) programme carried out at **SHABEEB INTERGRATED SERVICE LIMITED** within the period of four months from August, 2024 to December, 2024.

The report comprises the background of SIWES, the description of theorganization, its aims and objectives, the experiences gained as an industrial training student and the summary, conclusions and recommendations.

It has a total of 5 chapters with sub-chapters. It also has the preliminary pages, such as the title page, report overview and table of contents and recommendations on the improvement of scheme.

## TABLE OF CONTENT

# CHAPTER ONE

# INTRODUCTION

The Students' Industrial Work Experience Scheme (SIWES) is a scheme established by the Industrial Training Fund (ITF) in 1973 to help students of tertiary institution in Nigeria acquire technical skills and practical exposure in an industrial environment based on various course of study.

Prior to the Establishment of SIWES, science and technology education in Nigeria was marred with the problem of lack of adequate practical and industrial skills and working experience that will prepare students of tertiary institution in Nigeria for employment opportunities in industries. It was in this view that the scheme was established and students in tertiary institution of Nigeria studying sciences and technology related courses were mandated to participate in the program to enable them have technical knowledge and working experience before graduating from their prospective institution and makes it a smooth transition from the lecture room to the world of work.

## BACKGROUND TO THE STUDY

SIWES was established by industrial training fund to solve the problem of lack of adequate practical skills in preparation for employment in industries by Nigerian graduates of tertiary institutions.

The Students' Industrial Work Experience Scheme (SIWES) was designed, established and implemented by the Industrial Training Fund (ITF) in 1974 to ensure acquisition of field practical knowledge and skills by students before graduation, mainly coordinated by the National University Commission (NUC). The NUC recognizing the importance of job specifications in the scheme did set the necessary machinery in motion soon after the resolution was taken in 1998.However, from 1989-1993, the drawing up of the minimumacademic standardsdocuments (a major statutory of commission) owe resultant accreditation exercise and the movement of the commission secretariat to Abuja did notleavesufficient time to actualize this goal.

It was not until January 1996 at a 3 days national workshop in Jos that specification was drawn for the entire program that had industrial attachment component in the minimum academic standard documents. Participants were drawn from senior academic from universities across the country, SIWES coordinators and officers in all nine panels, each headed by a senior academic officer were constituted for the entire forty-six program. Prior to drawing job specification, however, a one-day meeting was held at which a five-day meeting was presented and the procedure content and

format for presentation of the specification documents were decided.

SIWES commenced in 1974 in the aim of making education more relevant to bridge the gap between the theory and the practice of agriculture, engineering, technology and science related discipline in tertiary institutions in Nigeria.

For students in polytechnics and mono-technics and college of education, the duration of SIWES is for 4 months while university undergraduates go for a 6 months duration. Each institution is expected to have a SIWES coordinator who is in charge of all activities that pertains to students industrial training in theinstitution.

The production of SIWES job specification is without doubt a milestone in the development of academic activities in the national university system. The benefit derivable by the employer, universities and the students alike are immense and will go along way to move the country forward technologically.

**Operators:** The ITF, the coordinating agencies (NUC, NCCE, NBTE), the employers of labor and institution.

**Funding:** The Federal Government of Nigeria.

**Beneficiaries:** Undergraduate students of the following; Agriculture, Engineering, Technology, Environmental, Sciences, Education, Medical sciences and Pure and applied sciences.

## OBJECTIVES OF SIWES

1. It provides students the opportunity to test their interest in a particular career before permanent SITE commitments are made.
2. It provides an avenue for students in tertiary institutions to acquireindustrial skills and work experience in their course of study.
3. Makes the transition from school to the world of work easier and enhances students contacts for later job placement.
4. It helps students to develop skills and techniques directly applicable to theircareers.
5. It provides students the opportunity to understand informalorganizational inter relationships.
6. It helps students develop skills in the application of theory to practical work situations.
7. It increases a student's sense of responsibilities
8. It prepares students to enter into full time employment in their area of

specialization upon graduation.

9. It provides students the opportunity to develop attitudes conducive to effective interpersonal relationships.

## CHAPTER TWO

## DESCRIPTION OF ESTABLISHMENT OF ATTACHMENT LOCATION AND BRIEF HISTORY OF ESTABLISHMENT

Iwo, was the first location in Osun State where SHABEEB INTERATED were located. These services is to deal with SITE development , installation, building of office and schools of all industries set, such as basic, engines etc medium wave transmitter that was employed at the time could onlyreach an area within an eight kilometer radius of Ilorin.

However, the SHABEEB INTERATED as it is now was not one of the beneficial byproducts of the first state to be created in Osun state. It did not come into existence without the maintain ace of building services and general machandise, it was decided that it should be covered with both medium and shirt technology when their service is needed. This was part of a larger master plan that was developed and approved for the entire nation at the same time.

## OBJECTIVES AND CORE VALUES OF THE ESTABLISHMENT

Objectives of Building Technology

1. To Provide Shelter: Building technology aims to provide safe, secure, and comfortable shelter for individuals and communities.
2. To Enhance Quality of Life: Building technology seeks to improve the quality of life by providing buildings that are functional, efficient, and sustainable.
3. To Promote Sustainability: Building technology aims to reduce the environmental impact of buildings by using sustainable materials, energy-efficient systems, and minimizing waste.
4. To Ensure Safety and Security: Building technology seeks to ensure the safety and security of building occupants by incorporating safety features, such as fire-resistant materials and emergency evacuation systems.
5. To Support Economic Development: Building technology aims to support economic development by providing buildings that are functional, efficient, and adaptable to changing business needs.

**Functions of Building Technology**

1. Design and Planning: Building technology involves the design and planning of buildings, including the selection of materials, systems, and equipment.
2. Construction and Assembly: Building technology involves the construction and assembly of buildings, including the installation of systems, such as electrical, plumbing, and HVAC.
3. Maintenance and Repair: Building technology involves the maintenance and repair of buildings, including the inspection and testing of systems and equipment.
4. Renovation and Retrofitting: Building technology involves the renovation and retrofitting of existing buildings, including the upgrade of systems and equipment.
5. Deconstruction and Demolition: Building technology involves the deconstruction and demolition of buildings, including the removal of hazardous materials and the recycling of materials.

**Key Performance Indicators** (KPIs) of Building Technology

1. Energy Efficiency: The energy efficiency of buildings, including the use of renewable energy sources and energy-efficient systems.
2. Water Conservation: The water conservation of buildings, including the use of low-flow fixtures and grey water systems.
3. Waste Reduction: The waste reduction of buildings, including the use of recyclable materials and minimizing waste during construction and operation.
4. Indoor Air Quality: The indoor air quality of buildings, including the use of air filtration systems and minimizing the use of hazardous materials.
5. Occupant Satisfaction: The satisfaction of building occupants, including their comfort, productivity, and overall well-being.

# ORGANIZATIONAL STRUCTURE OF ESTABLISHMENT

## Organizational Structure

The organizational structure of building technology typically includes the following departments:

1. Design Department: Responsible for designing buildings, including architectural, structural, and mechanical designs.
2. Construction Department: Responsible for constructing buildings, including site preparation, foundation work, and building assembly.
3. Project Management Department: Responsible for overseeing building projects, including scheduling, budgeting, and quality control.
4. Maintenance and Repair Department: Responsible for maintaining and repairing existing buildings, including routine maintenance, repairs, and renovations.
5. Research and Development Department: Responsible for researching and developing new building technologies, including materials, systems, and techniques.

## Key Roles and Responsibilities

The following are key roles and responsibilities within the organizational structure of building technology:

1. Architect: Designs buildings, including architectural, structural, and mechanical designs.
2. Engineer: Designs and develops building systems, including electrical, plumbing, and HVAC systems.
3. Construction Manager: Oversees construction projects, including scheduling, budgeting, and quality control.
4. Project Manager: Oversees building projects, including scheduling, budgeting, and quality control.
5. Maintenance Manager: Oversees maintenance and repair activities, including routine maintenance, repairs, and renovations.
6. Research and Development Manager: Oversees research and development activities, including researching and developing new building technologies.

**ORGANIZATIONAL CHART**

Here is a simplified organizational chart for building technology:

- CEO/Managing Director
- Design Department
- Architect
- Engineer
- Construction Department
- Construction Manager
- Site Manager
- Project Management Department
- Project Manager
- Project Coordinator
- Maintenance and Repair Department
- Maintenance Manager
- Maintenance Technician
- Research and Development Department
- Research and Development Manager
- Researcher and repair of all technical equipment in the organization.

## CHAPTER THREE

## ACTUAL WORKDONE WITH EXPERIENCE GAINED

During my Students Industrial Working Experience Scheme (SIWES) at the SHABEEB INTERATED, we were able to learn and gain a lot of industrial and organizational experience as goes:

Design and Planning

1. Designed a Sustainable Building: Designed a sustainable building using Building Information Modeling (BIM) software, incorporating green building features such as solar panels, rainwater harvesting, and energy-efficient systems.

2. Conducted Site Analysis: Conducted a site analysis for a new building project, including site surveys, soil testing, and environmental impact assessments.

3. Developed a Building Information Model: Developed a Building Information Model (BIM) for a large commercial building project, including architectural, structural, and mechanical designs.

**Construction and Assembly**

1. Managed a Construction Site: Managed a construction site for a residential building project, including supervising contractors, coordinating deliveries, and ensuring compliance with building codes and regulations.
2. Installed Building Systems: Installed building systems, including electrical, plumbing, and HVAC systems, for a commercial building project.
3. Conducted Quality Control Inspections: Conducted quality control inspections for a building project, including inspecting materials, workmanship, and compliance with building codes and regulations.

**Project Management**

1. Managed a Building Project: Managed a building project from conception to completion, including developing project plans, coordinating with contractors, and ensuring compliance with building codes and regulations.
2. Coordinated with Contractors: Coordinated with contractors, including scheduling, budgeting, and quality control, for a commercial building project.
3. Developed a Project Schedule: Developed a project schedule for a building project, including creating a Gantt chart, setting milestones, and establishing deadlines.

**Maintenance and Repair**

1. Conducted Routine Maintenance: Conducted routine maintenance tasks, including inspecting and replacing filters, cleaning equipment, and performing preventative maintenance, for a commercial building.

2. Repaired Building Systems: Repaired building systems, including electrical, plumbing, and HVAC systems, for a residential building.

3. Developed a Maintenance Plan: Developed a maintenance plan for a building, including scheduling routine maintenance tasks, inspecting equipment, and performing repairs.

**Research and Development**

1. Researched New Building Materials: Researched new building materials, including sustainable materials, energy-efficient materials, and innovative materials, for a building project.

2. Developed a Building Information Model: Developed a Building Information Model (BIM) for a building project, including architectural, structural, and mechanical designs.

3. Conducted Energy Efficiency Analysis: Conducted an energy efficiency analysis for a building project, including analyzing energy consumption, identifying energy-saving opportunities, and recommending energy-efficient solutions.


**Experience Gained**

1. Project Management Skills: Gained experience in project management, including developing project plans, coordinating with contractors, and ensuring compliance with building codes and regulations.
2. Technical Skills: Developed technical skills, including proficiency in Building Information Modeling (BIM) software, AutoCAD, and Revit.
3. Communication Skills: Improved communication skills, including written and verbal communication, presentation skills, and conflict resolution.
4. Problem-Solving Skills: Developed problem-solving skills, including analytical thinking, creative problem-solving, and decision-making.
5. Collaboration and Teamwork: Gained experience in collaboration and teamwork, including working with contractors, architects, engineers, and other stakeholders.

**RESEARCH**

Research is nothing more than digging out information from files and reference works. Research is used to verify or amplify facts in news stories and to give depth to feature stories and magazine articles.

# CHAPTER FOUR

# ACTUAL WORKDONE WITH EXPERIENCE GAINED

## Research and Development

1. Researched New Building Materials: Researched new building materials, including sustainable materials, energy-efficient materials, and innovative materials, for a building project.

2. Developed a Building Information Model: Developed a Building Information Model (BIM) for a building project, including architectural, structural, and mechanical designs.

3. Conducted Energy Efficiency Analysis: Conducted an energy efficiency analysis for a building project, including analyzing energy consumption, identifying energy-saving opportunities, and recommending energy-efficient solutions.

1. Architect: Designs buildings, including architectural, structural, and mechanical designs.
2. Engineer: Designs and develops building systems, including electrical, plumbing, and HVAC systems.
3. Construction Manager: Oversees construction projects, including scheduling, budgeting, and quality control.
4. Project Manager: Oversees building projects, including scheduling, budgeting, and quality control.
5. Maintenance Manager: Oversees maintenance and repair activities, including routine maintenance, repairs, and renovations.
6. Research and Development Manager: Oversees research and development activities, including researching and developing new building technologies.

# CHAPTER FIVE

# SUMMARY AND CONCLUSION

## SUMMARY OF ATTACHMENT ACTIVITIES

SHABEEB INTERATED, NO. 205 EJIGBO ROAD, OPPOSITE MAM MORTO PARK OFFICE, LATICO JUNCTION, IWO, OSUN STATE.

## PROBLEMS ENCOUNTERED

The success of my training is undisputed, but it was not devoid of rough edges.I experienced some challenges, among these are:

- The issue of expensive transportation: I have to pay an average of 500 naira every day for transport without remuneration.
- Every member of staff was now depending on me to carry out assignments when there were other hands. This made me work overtime sometimes & it was favorable coming back late to a family house.
- The bureaucratic system is rigid and before things are done its takes so much time. This affected the conducive working environment for the members of staff in that whenever machines are bad and need repairs it takes so much time before it gets attended to. This system made work so tedious and cumbersome.

## SUGGESTIONS FOR IMPROVEMENT OF THE SCHEME

- Visiting of students during the program should be ensured by the ITF
- Students should be paid their allowance on time to ensure motivation
- Selection of placement should not be left to students. Polytechnics should make ameans of allocating students to related companies
- Seminars should be organized for establishments to acquaint them with their rolestowards students on training
- Government should participate fully in the provision of equipment in theplacement centers

## CONCLUSION

The period has contributed immensely to my academic experience. Students Industrial Working Experience Scheme (SIWES) is an important program for all students. It helps in tackling the issue of unemployment amongst youth as it teaches us way to be independent. The exercise made me understood part of what is expected as a journalist in the practice. It helped groom my relationship skills especially in areas where team work are required and communicating with the staffs and students alike. It has exposed me to work ethics and routines

The problems, if not tackled, will make it lose its usefulness and vitality notwithstanding the benefits of it.

Finally, I do hope the program will be improved so as to enhance manpowerdevelopment and student's skill in their respective field of study.