

NAME: EBITU, UKPONO FRIDAY

MAT. NO: 18/ENG04/027

DEPT: ELECTRICAL ELECTRONICS
ENGINEERING

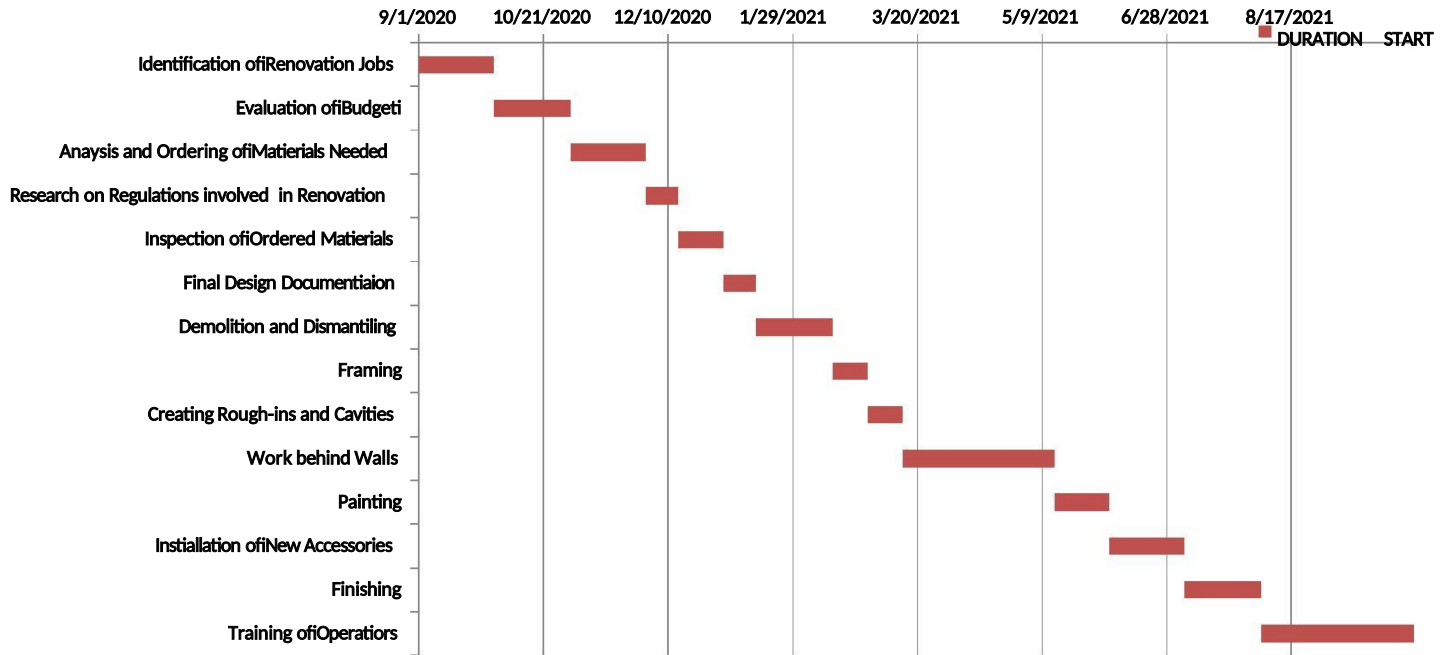
COURSE: ENGINEER IN SOCIETY

COURSE CODE: ENG284

SCOPE OF WORK

- The project is first conceived by the school management and the possibilities discussed.
- The renovations company is enlisted to bring the project to reality.
- The management comes to an agreement with the company on the duration of the project, payment and workforce mobilization plans.
- A list of the project requirements is drafted.
- A team of professionals are brought to do a brief survey on the site to determine the project milestones and deliver deadline.
- Clearance of valuables within the structure premises commences, starting with the removal of unfixed items, e.g. furniture, printers, audio systems etc.
- The fixed equipment in the structure are the removed.
- The premises is then secured by a perimeter setup of aluminum sheets to restrict movement and to avoid any accidents.
- The roofing sheets are taken off and stacked to be examined and the reusable ones separated from the permanently damaged.
- Work commences with the civil engineers and the laborers at where additional constructions and renovations are required. While the electrical engineers examine the structure for where more wiring is required and also for the plumbers to find the plumbing and pipe layout specifications.
- The painters and tilers simultaneously work together.
- The debris around the site is cleared and properly disposed.
- The initially removed equipment are reinstalled with the new additional equipment at their appropriate locations.
- The structure is then cleaned and cleared of dust.
- The barricades are removed and the building is set.

Project Gantt Chart



List of Human Resources Needed

1. Electricians and Lighting Technicians
2. Plumber
3. Painters
4. Carpenters
5. Structural Engineer
6. Construction Workers and Operators
7. Safety manager
8. HVAC Technician/Sub Contractor
9. Suppliers
10. Interior Designer
11. Quantity Surveyor
12. Flooring Expert
13. Construction Foreman
14. Architect
15. HVAC and new Projector System trainers
16. Transporters
17. Security Guards

Project Team

This includes the following;

- The lead consultant: this will be the architect that will be appointed for the project. The architect will be responsible for envisioning the needs of The Founder and the needs of the school.
Site Manager(Clerk of works)
- Main Contractor and sub-contractors
- Construction Team Leader
- Design team (designers and licensed engineers)
- Other consultants(For HVAC system)
- Safety Team including the Safety Manager
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Why was The Site Secured?

The site is a very expensive work where the project is implemented and they are very vulnerable to all types of problem. As the work is in progress, aside from Alfa Belgore hall being rehabilitated, expensive equipment and valuable materials that are being used are kept on the site. The tools, equipment, machinery, and materials are also worth millions of Naira. The project will also be on for several months so such materials equipment and the site will be open to a heap of potential disasters.

For these reasons the security of the site is hugely important. A group of security guards will be on patrol day and night looking out for any suspicious or criminal activities.

PAYMENT SCHEDULE

TASK	TIME OF PAYMENT	PAYMENT SCHEDULED IN PERCENTAGE	COST
Mobilis	01/09/2020	30%	₱10,500,000
During construc	02/04/2020	30%	₱10,500,000
Final Payment	05/10/2021	30%	₱10,500,000
DLP	05/04/2022 (6months afier completionn	10%	₱3,500,000
Total Es Cost	₱35,000,000		
Total Time	399 days excluding DLP		

BILL OF ENGINEERING MEASUREMENT AND EVALUATION

S/N	Description	Quantity	Price(₦)	Percentage from TEC	Cost
1	Porcelain and Ceramic Tiles	4320 Tiles	405/ft ²	5%	₦1,750,000.00
2	Doors	10 Units	35,000	1%	₦350,000.00
3	Large Windows	50 Units	14000	2%	₦700,000.00
4	HVAC System	1 Unit		10%	₦3,500,000.00
5	Paint	50 Gallons	14000	2%	₦700,000.00
6	Lights	93 Units	15000	4%	₦1,400,000.00
7	Water Closets and Basins	9 Units	38500	1%	₦350,000.00
8	Other construction materials	-	-	23%	₦8,050,000.00
9	Consultant fee	-	-	15%	₦5,250,000.00
10	Site Preparations and Clearing after Completion	-	-	5%	₦1,750,000.00
11	Transportation	-	-	12%	₦4,200,000.00
12	Profit			20%	₦7,000,000.00
	TOTAL				₦35,000,000.00

BEME

{Bill of engineering measurement and evaluation}

This is a description and evaluation of evidence pertinent to a clearly formulated topic/ question that uses explicit scientific methodologies and methods to systematically identify information relevant OR it's a tool used before, during and after construction to assess and value the cost of construction work. This includes the cost of materials, labor, equipment, and all/any other resource(s) required for the success of any construction endeavor based on pre-determined scope and specification.

DEFECT LIABILITY PERIOD

This is a period of time following practical completion during which a contractor remains liable under the building contract for dealing with any defects, which becomes apparent. This period is between six months to twelve months varying depending on the contracts used. Any defects or faults which arise during this period must be put right by the contractor at its own expense.

LEAD CONSULTANT

A lead consultant is a consultant that directs the work of a consultant team and is the main point of contact for communication between the client and the consultant team, except for on significant design issues where the lead designer may become the main point of contact.

PROJECT LIFE CYCLE

A project life cycle is a sequence of phases that a project goes through from initiation, planning, implementation down to the closure. The phases have a definite start, end, and a control point and are constrained by time. A project life cycle can range from predictive or plan-driven approaches to adaptive or change-driven approaches. The life cycle provides foundation of the actions that has to be performed in the project irrespective of the specific work involved.

ENVIRONMENT IMPACT ASSESSMENT {EIA}

This is an assessment of the environmental consequences of a plan, policy, program, or actual project prior to the decision to move forward with the proposed action OR This is a process of evaluating the likely environmental impact of a proposed project or development, taking into account inter-related socio-economic, cultural and human-health impacts, both beneficial and adverse.