ZLGA College of Technology

DEPARTMENT OF WATER RESOURCES MANAGEMENT TECHNOLOGY.

WATER RESOURCES MANAGEMENT PROGRAMMES.

1. NATIONAL DIPOMA IN WATER RESOURCES MANAGEMENT - 2 YEARS
2. HIGHER DIPLOMA IN WATER RESOURCES MANAGEMENT TECHNOLOGY - 2 YEARS
3. WATER RESOURCES MANAGEMENT TECHNICIAN - 3 YEARS
4. CERTIFICATE IN WATER RESOURCES MANAGEMENT - 2 YEARS.
5. WATER RESOURCES MANAGEMENT - 2 YEARS

REQUIREMENTS:

WATER RESOURCES MANAGEMENT TECHNOLOGY

Programme: HND in Water Resources Management Technology.

(Approved by West Africa Health Examination Board (WAHEB and National Board for Technical Education [NBTE]

Requirements:

a) 5 O' Credit (WASC,NECO, NABTEB) in English language, Biology, Chemistry, Mathematics, Physics

Not more than two (2) sittings)

b) National Diploma in Environmental Health by WAHEB for Direct Entry

Duration: 2 years for holders of ND in Environmental Health Technology and four years for O' Level holders.

WATER RESOURCES MANAGEMENT TECHNICIAN

Programme: Diploma in Water Resources Management Technician

(Approved by West Africa Health Examination Board)

Requirements: four (4) O'L Credits (WASC, NECO, NABTEB in English language, Biology, Chemistry, Mathematics, Physics (Not more than two (2) sittings)

Duration: 3 years.

Duration: 2 years for holders of ND in Environmental Waste Management Technology, and Four years for O'Level holders (WASC,NECO, NABTEB) + 1 year Internship.

OND IN ENVIRONMENTAL WASTE MANAGEMENT TECHNOLOGY PROGRAMME:
HND in Environmental Waste Management.
(Approved by West Africa Health Examination Board (WAHEB and National Board for Technical Education [NBTE])

Requirements:
a) 5 O'L Credits (WASC, NECO, NABTEB) in English language, Biology, Chemistry, Mathematics, Physics, Geography.
(Not more than two (2) sittings).
Duration: 2 years

ENVIRONMENTAL WASTE MANAGEMENT TECHNICIAN
Programme: OND : Diploma in Environmental Waste Management Technician
(Approved by West Africa Health Examination Board)
Requirements: Four (4) O'L Credits (WASC,NECO, NABTEB) in English language and three (3) Credits in Biology, Chemistry, Mathematics, Physics, Geography (Not more than two (2) sittings)
Duration: 3 years

ENVIRONMENTAL WASTE MANAGEMENT ASSISTANT.
Programme: Certificate in Environmental Waste Management
(Approved by West Africa Health Examination Board)
Requirements: Three (3) O'L Credit (WASC, NECO, NABTEB) in any of the Science Subjects and at least a pass in English language.
Duration: 2 years

WATER RESOURCES MANAGEMENT ASSISTANT

Programme: Certificate in Environmental Water Resources Management Assistant

(Approved by West Africa Health Examination Board)

Requirements: Three (3) O'L Credit (WASC, NECO, NABTEB) in any of the Science Subjects and at least a pass in English language.

Duration: 2 years

COURSE DETAILS:

WRM 405: Water treatment Technology.

Importance of water; Sources of water; Quality of clean water. Water treatment stages - chemical coagulation, flocculation, sedimentation, filtration and disinfection. Methods of removing heavy metals from water. Water softener systems: Ion exchanger and activated carbon; mechanism of ion exchanger and activated carbon. Common filtration techniques; advantages and disadvantages of filtered water. Water filtration system: Reverse osmosis drinking water filtration system: water treatment principles, application, success and limitations.

Surface water treatment process (water work). Latest water purification technologies - Ultraviolet (UV) water purification, electrodeionization, Nanotechnologies, Acoustic nanotube technology, Photocatalyst water purification technology, Aquaporin inside technology, Automatic variable filtration (AVF) technology.

WRM 305: Water sustainability and water infrastructure Management Technology

Meaning of water sustainability. Water management infrastructure. Building sustainable water infrastructure. Tap water as the most sustainable water option followed by filtered water. Types of water infrastructure - Grey infrastructure and green infrastructure. Basic infrastructure facilities. Water infrastructure examples. Importance of water infrastructure. Drinking water infrastructure. Water infrastructure investment; Water infrastructure problems. Maintenance and improvement of water infrastructure. Water infrastructure projects.

EWT 405: Sachet/Bottled Water Production Technology-

Procedure for setting up sachet/bottled water production. Requirements to start successful pure water production business in Nigeria. Water sources, condition and treatment requirement - Impurities in the raw water to be processed (impurities to remove). How to process sachet and waters. Equipment needed for sachet and bottled water production. Sachet/bottled water treatment process - water treatment steps. Water bottling plants. Packaged bottle & sachet water production equipment and technology. Stages of making a water bottle. Marking strategies for the sachet and bottled waters. Environmental impact of sachet/ bottled water production. Field trips.

EWT 407: Water Analysis Technology

EWT 219: Water Quality Assessment Criteria.