UNIVERSITY OF JOHANNESBURG

Process, Energy and Environmental Technology Station (UJ PEETS)

ENERGY

Renewable Energy Solutions Energy Efficiency Waste to Energy Conversion Energy Micro-Grids & Mini-Grids Energy Storage







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Short Learning Programme (SLP) Anaerobic Digestion of Wastewater Sludge for Biogas

INTRODUCTION

The management of organic municipal solid waste, sewage sludge, agricultural waste and organic industrial processes is a challenge due to their environmental pollution. One of the approaches to derive value from organic waste is through anaerobic digestion to generate biogas and organic fertiliser.

CANDIDATE REQUIREMENTS

NQF level 5 students. The course will be beneficial to municipal officials, farmers, green circular economy consultants, environmental enthusiasts and financial sectors.

COST: R12 340.00

TOPICS

SECTION 1

- Introduction to organic waste management
- The science and technology for biogas production
- Anaerobic digestion plants
- Digester types and components
- State of AD technology in South Africa

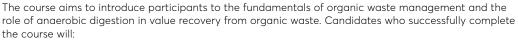
SECTION 2

- Substrate for biogas production
- Substrate handling and preparation
- Biogas cleaning and application
- Digestate management and application
- Field trip

SECTION 3

- Pre-feasibility analysis
- Design considerations
- Basic plant sizing
- Start-up and operations
- Regulatory framework & safety

THE COURSE



- Identify viable organic waste suitable for anaerobic digestion.
- Understand the principle of converting organic waste to biogas.
- Gain knowledge about the application of biogas and the environmental, ecological and socio-economic benefits of this technology.

Type of course: Presented online and some in person contact. Total no of hours: 80

Qualification: Successful candidates will receive a Certificate of Completion.

Complete the SIGN-UP FORM to register interest.

For further enquiries send an email to peetstraining@uj.ac.za

