SHORT LEARNING PROGRAMME

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.

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

The course aims to introduce participants to the fundamentals of organic waste management and the role of anaerobic digestion in value recovery from organic waste. Candidates who successfully complete the course will:

- 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.

For further enquiries: peetstraining@uj.ac.za

Complete the Sign-Up form to register interest - click **here**.