



Short Learning Programme

Anaerobic Digestion Training Course

Introduction to Biogas Technology

Waste to Energy

This SLP is sponsored by **EWSETA** (The Energy & Water Sector Education Training Authority - a skills development authority serving the energy and water sectors) in partnership with UJ PEETS.

The course is open to **unemployed UJ Graduates** and fulfil the following criteria. Persons with disability are encouraged to apply.

- Youth – up to 34 years of age
- Entry Level NQF 5
- Currently unemployed
- A UJ Graduate

Candidates will be assessed according to the SETA Employment Equity Guidelines

APPLICATIONS

- All applicants to complete the Google Form [here](#) and submit supporting documentation on the UJ Link overleaf
- Closing date: 18 November 2022 at midnight
- All applicants to submit a 200 – 250 word write-up on their interest in the circular economy
- Successful candidates will be notified on 22 November 2022

ABOUT THE SLP

The SLP is aimed at developing the fundamental knowledge about organic waste and the role of anaerobic digestion to extract value from organic waste. In addition, the programme sets the foundation knowledge required for more advanced anaerobic digestion courses and prepares the students for advanced theoretical and practical courses. At the end of this course, participants should understand the present management of organic waste; the potential value inherent in the organic waste; how anaerobic digestion can be used to extract value from organic waste; the existing legislation around organic waste management and the role of biogas and the by-products of anaerobic digestion within the green economy.

COURSE OUTLINE

- 25 November 2022 – 09 December 2022
- It is a self taught online course on Blackboard at your own pace
- Approximately 100 hours of self study
- A virtual welcome on 25 November 2022
- Two mandatory online Q&A sessions to assist with preparation for the exam
- Successful students will receive a UJ SLP Certificate

ABOUT BIOGAS

The management of organic fraction of municipal solid waste, sewage sludge, agricultural waste and organic fraction industrial processes is a challenge due to their environmental pollution and non-recyclable characteristics. One of the approaches for deriving value from organic waste is through anaerobic digestion to generate biogas and organic fertilizer.

Through the effective management of organic waste, waste to landfill is reduced, economic return is possible, job creation, clean air, reduction of GHG emission and clean renewable energy are generated. Presently, there is limited knowledge on the potential of organic waste in South Africa.

Municipal officials, farmers, hospitality industries, supermarket and general public needs to know the value in their organic waste and extract this value before disposing it.

Effective management of organic waste and appropriate policy development will not only increase the air quality of the country, it creates knowledge and technical know-how that could be exported to other African countries with similar waste management problems.

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TOPICS COVERED

SECTION 1

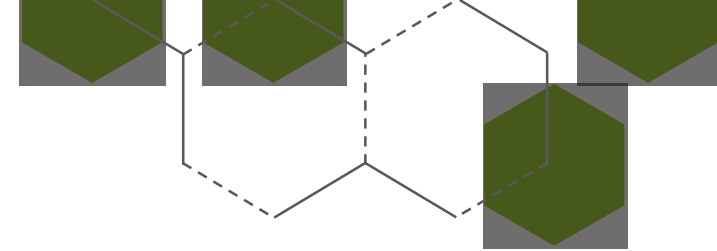
- Introduction to organic waste management
- The science and technology for biogas production
- Anaerobic digestion plants
- Digester types and components
- State of AD technology in South Africa

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



WHERE TO APPLY

Token: **FEBESLP**

Registered UJ students please follow this [link](#) and use your **student number and pin** to log in.

- Email the copies of your academic transcript, your highest obtained certificate and ID document to ujappdocs@listsrv.uj.ac.za and **CC Ms Maggy Ngolwane (maggyn@uj.ac.za)** with **your student number as the subject line** – to expedite your application.
- Ms Maggy Ngolwane is handling applications and registrations for the course.
- Students acknowledge that they will be liable to repay the full R9500 sponsorship if they fail to complete the SLP.
- Queries can be directed to: peets@uj.ac.za with the subject line: **SLP – Introduction to Biogas**
Tel: 011 559 6430