

Course duration – 1 day

Increasing Methane Yields: understanding the science behind anaerobic digestion

What is it?

This one-day course for commercial operators and waste recycling facilities including farmers, has been designed to help safely increase methane yields from waste on UK AD sites and give technicians operating AD sites a thorough understanding of the chemistry and science that lies behind the anaerobic digestion process.

The course provides operators with an understanding of factors which could assist in reducing the risk of future incidents and accidents, as well as how to increase yields.

It was developed in conjunction with leading bioeconomy consultants NNFCC.

Who should attend?

This course is aimed at commercial operators and farmers in the UK's growing anaerobic digestion (AD) sector. Improving the underpinning scientific knowledge of plant operatives helps raise their confidence and encourages them to have greater input into the production process.

This not only assists with individual self-development but also enables staff to identify ways in which production can be fine-tuned to optimise methane yields, resulting in greater plant profitability.

How is it delivered?

Courses are delivered by Cogent Skills Assured Training Providers at a time and place to suit participants, including at operational anaerobic digestion facilities where possible.

All providers are subject to a rigorous quality assurance process and have had their training delivery and personnel checked against the requirements and outputs of the course.

"I found the Increasing Methane Yields course very useful, especially the part on Feedstock information. The trainers were very good at delivering the course"

Guy Mills, Plant Manager, Andigestion Ltd



How do I get involved?

Call Cogent Skills today on **01325 740900** or email industry@cogentskills.com to register your interest. We will work with you to agree a suitable time and Cogent Skills Assured Provider to deliver the course.

What will I learn?

Learning covers the scientific knowledge appropriate to operator-level staff employed on both farm and commercial anaerobic digestion sites, including the importance of controlling and understanding variables such as VFA (Volatile Fatty Acid), carbon to nitrogen ratio, pH, gas flow rate, temperature and acidity.

The course structure includes a combination of presentations, exercises, case studies and group discussions across four key areas:

Feedstock Procurement & Preparation

1. Quality vs. quantity
2. Composition
3. Compatibility
4. Pre-treatment options – technology & biological options
5. Regulatory compliance

The Process: Anaerobic Digestion

1. Understanding the science
2. Dietary needs
3. Monitoring plant health
4. Diagnosing and treating health problems
5. Achieving quality and consistent outputs
6. Regulatory compliance

Output 1: Biogas

1. Understanding the value and the market
2. Quality vs. quantity
3. Safety considerations
4. Efficiency gains
5. Regulatory compliance

Output 2: Digestate

1. Understanding the product

About NNFCC

Established by the UK Government in 2003 as the National Non-Food Crops Centre, NNFCC has grown to become a leading UK consultancy focused on the conversion of biomass to bioenergy, biofuels and bio-based products.

The company acts as an advisor to UK Government, providing technical, market and policy expertise, and is the appointed development partner for the Cogent Skills Increasing Methane Yields course.

www.nnfcc.co.uk

“The Increasing Methane Yields course was very good and well balanced. The trainers were also very good at delivering the course”

Andrew Rouse, Process Engineer, Rouseabout Ltd



Increasing Methane Yields course is part of the Gold Standard framework*

* The Gold Standard has been developed for industry by industry as a national framework for continuing professional development (CPD) in the process industries.

How much does it cost?

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|  Course 1 | £3600 +VAT |
| In house course for up to 12 delegates | |
|  Course 2: | £400 +VAT |
| Open course per delegate | |

How to book and for more information:

-  Call **01325 740900**
-  Email **industry@cogentskills.com**
-  Book online at **www.skillsstore.com**

Cogent skills
for science industries