



Training course:

Heat Metering and Data Collection Equipment

Enquire about our Sycous training courses today!

Register your interest at <https://sycous.com/training>



Sycous are excited to announce we have been chosen by **Department for Energy Security and Net Zero** to help develop a new generation of heat network professionals!

We understand the current skills gap in regards to metering and data collection equipment when it comes to their installation and maintenance on heat networks.

Our training courses aim to help individuals and M&E contractors in improving the efficiency of heat networks.



Heat Metering and Data Collection Equipment

Our Heat metering and data collection training course aims to provide the niche skills and knowledge required by individuals for working with heat metering and data collection equipment. It will be a single day training aimed at complementing the skills of existing M&E professionals.



Who is this course for?

- » Existing **Mechanical & Electrical** contractors and professionals.

Heat network operators:

- » Key individuals from relevant teams (i.e. procurement).
- » Internal Mechanical & Electrical teams or third parties.

Course outcomes:

The skills learned in this course will help individuals by:

- » Complementing existing skills, allowing them to apply for opportunities and enter the industry.
- » Upskilling to further job progression and support bidding for work.
- » Improving the running of metering networks and increase efficiency of work on metering systems, reducing quality issues, and improving time to resolution for technical issues that affect billing.
- » Gaining a better understanding of compliance and future compliance and metering best practice.



Course outline:

Our training course focuses on elements that are particular to heat metering and data collection equipment, which can then be combined with an individual's existing practical skills to enable reliable and competent installation or maintenance of heat network metering equipment.

Principles of a heat meter

An introduction to the principles of heat metering, which will provide trainees with knowledge of:

1. the main components of a heat meter
2. the variations in flow sensor technology and the specific uses, benefits and drawbacks
3. how the components of a heat meter provide useful metering data (the component data collected, and the calculations undertaken)

Metering and data collection essentials

A detailed introduction to actual metering equipment, which will provide trainees with an understanding of:

1. the common manufacturers and models.
2. the data provided by metering equipment for transmissions through data collection systems, and the different data formats
3. Common data collection systems
 - a. Wired and Wireless MBus systems
 - b. PAYG systems
 - c. LoRaWAN systems

Heat meter installation

A detailed introduction to the process of meter installation, which will provide trainees with the knowledge of:

1. the process for meter installation and commissioning
2. the tools required for meter installation and commissioning.
3. the software required for meter installation and commissioning
4. the skills required for successful heat meter installation.

Heat meter and data collection interactions

A worked physical example of heat meter connection to a data collection system, which will provide trainees with skills to:

1. identify different data collection systems
2. set up a successful meter to wired data collection systems
3. set up a successful meter to wireless data collection system
4. commission a data collection system

Heat meter and PAYG interactions

A worked physical example of heat meter connection to a PAYG system, which will provide trainees with knowledge of:

1. how metering equipment and PAYG systems interact
2. the variation in different PAYG systems (mesh communication and direct communication systems)

Common issues and troubleshooting

An introduction to the common issues experienced in heat meter installation and operation, which will give trainees the skills to:

1. identify the meaning of common meter error codes
2. identify the best way to troubleshoot metering and data collection issues
3. avoid the common pitfalls of heat meter installation.

