

Skills Bootcamp in Low Temperature Heating Systems

What are Skills bootcamps?

Skills Bootcamps are substantially funded, 60-hour training programs which enable Sole Traders and SME employees to up-skill in Level 2/3 accredited training

This program is funded by The Department for Education as part of the government's Lifetime Skills Guarantee.

This comprehensive training programme focuses on Low-Temperature Heating and Hot Water Systems in domestic and small commercial properties and the changes to Part L of the building regulations. Designed for experienced heating installers who work with gas, LPG, solid fuel, oil or biomass this training will equip you with the knowledge and hands-on experience needed to install and maintain Heat Pump Systems, one of the most effective solutions for renewable energy heating.

Upon completion of this 8-day training programme, you will have the knowledge and hands on experience to meet manufacturer requirements for heat pump installation, ensure proper commissioning and register the warranty, while adhering to relevant building regulations and industry standards.



DAY 1

Heat Pump Systems - Core Unit

- Types of Heat Pumps
- Heat Pump COP & SPF
- Heat Pump Science, vapour compression cycle & components
- Monovalent & bi-valiant systems
- Planning and siting of units
- Hydronic systems
- Building heat loss & heat emitters

DAY 2

Heat Pump Systems - Core Unit

- ASHP design, heat loss calculations, pipework heating design
- Commissioning and balancing
- Customer handover and paperwork
- Maintenance and Servicing or ASHP
- Fault Finding of ASHP's
- Online Assessment Core Unit
- Practical exam

DAY 3

Heat Pump Systems - Air Unit

- Online Exam- Air Unit
- MCS Paperwork
- Ground Source Heat Pumps application, including GSHP pipe collectors (arrays)
- Installation considerations, Ground types and extraction rates

For more information speak to our technical team.

www.greenskills.london
Greenskills@windsor-forest.ac.uk

To register,
SCAN Code



01753793244

Slough and Langley College.
Station Rd, Langley, SL3 8BY

DAY 4 Heat Pump Systems - Ground Unit

- Filling, flushing, setting to work and maintenance of GSHP
- Commissioning of GSHP
- Online exam - Ground Source Unit
- Practical Assessment

DAY 5 Underfloor Heating Systems

- The history of underfloor heating
- The principals of underfloor heating
- The different underfloor heating systems
- Design outputs
- Correct installation

DAY 6 Underfloor Heating Systems

- Testing and commissioning
- Control strategies
- Integration with high/low temperature heating systems
- Multiple choice Assessment

DAY 7 Low Temperature Heating

- R values and U values
- Heat Loss formulas
- Radiator Factors and sizing
- Underfloor heating
- Pipe Sizing
- Calculating loads at different delta T's
- Pressure drop
- Flow rates

DAY 8 Low Temperature Heating

- Assessment
- Recap
- KV Values
- Hydronic Separation
- Domestic Hot water sizing
- Pump sizing
- Expansion vessel sizing
- System Balancing
- Online Exam- Low Temperature Heating



John McGregor

Technical Tutor specialised in Building Services Engineering with experience in Healthcare, Education and high-end residential projects, with particular focus on Ventilation, Underfloor Heating and Low Temperature Systems.



Nigel Kirby

Technical Tutor specialised in Plumbing and Heating in domestic and small commercial properties, Social Housing, Construction and Refurbishment projects, with particular focus on Low Temperature Heating and Air and Ground Source Heat Pump systems.

Who we work with



Testimonials

What previous participants have said about our Skills Bootcamp training:

Gasways: All tutors were knowledgeable and very helpful during the bootcamp courses, the admin staff were amazing in arranging dates and times around my work schedule, Green Skills Academy has helped me develop my skill set further which has given me confidence to work in more than one field of work in my trade.

HIQ Heating: The programme is brilliant and very well

organised. The team is friendly and helpful, and the tutors are highly qualified and knowledgeable.

BDL Services: The course was well planned and informative, I would highly recommend Nigel Kirby, everything was perfect from the pace to the coaching, I have gained a whole new insight into Heat Pump Technology.

