

Domestic Retrofit Maps

How to use these maps

These maps show different job paths in the retrofit sector. They also show training for people who are new to this work or want to learn more about domestic retrofitting. Each job sector is divided into areas for skills training.

A key shows which courses are available for people living in the West of England. These maps are part of a group of Skills Connect resources, which include:

- Retrofit Careers Insights
- Speak to an Advisor
- A Training Directory

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Plumbing and Heating Pathway

HOW TO GUIDE

This page demonstrates the different types of training available at varying levels within the plumbing and heating career pathway. Pages The following pages demonstrate the opportunities to train in different areas of retrofit for people working in the plumbing and heating industry.

Level 4-5 Level 1-2 Level 3 Level 6-7

Level 1 NVO **Plumbing Studies**

Length: 1year Eligibility: 2x GCSE grade 2+ (inc English and Maths), or entry 3 qualification. Certificate in Skills for Working Life or Life Skills, ESOL Entry L3

Level 2 NVQ **Plumbing Studies**

Length: 1 year Eligibility: GCSE **English and Maths** (grade 4+) plus 2 GCSEs (grade 3+) or relevant Level 1 with GCSE English and Maths.

Level 2 Technical

Certificate in

Length: 1 year

years. Level 1

Eligibility: 16-18

Plumbing Trade

Plumbing

Level 3 NVQ Plumbing and **Domestic Heating**

(heat pumps, or solar thermal pathway options)

Length: Usually 3-4 years

Eligibility: Varies depending on experience and former quals (usually a level 2 qualification or equivalent)

Low-Carbon Heating Technician Apprenticeship

Length: Usually 3-4 years

Eligibility: Individual employers set their own entry requirements. typically includes GCSE English and Maths (grade C+).

Level 3 Plumbing and **Domestic Heating Technician** Apprenticeship

Length: Usually 3-4 years

including English and Maths) or a Level 2 course and functional skills.

certificate, English and maths (grade 4+)

COLOUR KEY:

16-18 years old ...

Level 1 Plumbing

Trade Certificate

18 years, grade 3+

in maths and

Length: 1 year

Eligibility: 16-

English

Courses offered by training providers within the West of England Courses not offered by training providers in the West of England but can be accessed outside the region.

Eligibility: 5 GCSEs (Grade 4+

Level 3 T Level in Building Services Engineering for Construction specialising in Plumbing **Engineering and Heating** Engineering.

Length: 2years

Eligibility: 16-19-year-olds, usually requires 4-5 GCSEs in grades 9 to 4 (A* to C) or equivalent, including **English and Maths**

Water Regulations and Unvented Hot Water Systems

Eligibility: Experienced Installers

Domestic Ventilation Systems

Eligibility: Experienced Installers

Retrofit Training

Eligibility: varies for each course

Installation courses usually require a Level 2 or 3 qualification.

Level 3 Certificate in installation and maintenance of:

- **Ground-Source Heat Pumps**
- Air-source Heat Pumps
- **Biomass Systems**
- Low-Temperature Heating and **Hot Water Systems**

Manufacturer Retrofit Courses

Informal retrofit courses for Continuous Professional Development (CPD)

Retrofit Skills Bootcamps

Accredited courses in new retrofit roles

View details on the Retrofit Map overleaf.

Level 4 HNC/HND Building **Services Engineering Senior Technician Apprenticeship**

Length: 3 years

Eligibility: English and maths minimum requirement is entry Level 3

Level 4 Higher National Certificate (HNC) Building Services Engineering

Length: 2 years Eligibility: Level 3 Building Services or other relevant Level 3 or industry experience.

Level 4 Apprenticeship Building **Energy Management Systems** (BEMS) Controls Engineer

Length: 3 years

Eligibility: English and maths minimum requirement is Entry Level 3

Level 6 Apprenticeship in **Building Services Design** Engineer

Length: 5 years Eligibility: relevant level 3 or 4 qualifications in the field

Level 6 Apprenticeship in **Building Services Engineer**

Length: 5 years Eligibility: relevant level 3 or 4 qualifications in the field

The plumbing occupation is not controlled or licenced with a specific qualification. The Chartered Institute for Plumbing and Heating Engineering describe Level 2 as a way to enter the industry, and level 3 as the most comprehensive training option (and often considered the industry-recognised standard). In some cases, learners can begin training at level 3, so be sure to speak to training providers about all training options available to you.

For more information, or to speak to an advisor visit www.skillsconnect.org.uk



Domestic Retrofit (Plumbing and Heating) Pathway

These are some (not all) of the courses available for professionals to train in areas of domestic retrofit.

Heat Pumps

Informal

OFTEC Installation, commissioning and servicing of air source heat pumps

NICEIC Certificate in Air Source Heat Pumps

OFTEC Design of Heat Pump Systems

OFTEC Installation of Ground/Water Source Heat Pumps

Length: 2-4 days

Eligibility: Relevant qualification

Heat Pump Installer (Online CPD)

Length: 5 hours

Eligibility: For qualified professionals.

Manufacturers offer a variety of different training. Examples are provided by the Heat Pump Association Level 1-2

BPEC Low Temperature Hot Water Heating Systems

Length: 2 days

Eligibility: Practicing plumbers and heating engineers who wish to design and install energy efficient low temperature hot water heating systems that use heat pumps as the heat source

To view training providers offering courses on heat pumps in the West of England, click to view our Skills Connect Directory.

Level 3

LCL level 3 Award in the Installation and Maintenance of Heat Pump Systems (Nonrefrigerant Circuits)

Length: 3 days

Eligibility: L2/3 in relevant qualification plus WRAS Water Regulations/Water Byelaws

L3 Apprenticeship: Refrigeration Air Conditioning and Heat Pump Engineering Technician

Length: 3 years

Eligibility: Individual employers set their own entry requirements, typically includes GCSE English and Maths (grade C+).

Level 3 in Air Source Heat Pump Installation

Length: 2 days

Eligibility: WRAS and UDHW qualifications.

Level 3 EAL Award in the Installation and Maintenance of Heat Pump Systems (Non-Refrigerant Circuits)

Length: 120 hours

Level 3

Eligibility: Relevant Level 2 or 3 qualification.

Level 3 BPEC Award in Air Source Heat Pump Systems

Length: 5 evenings

Eligibility: For qualified plumbing and heating engineers.

BPEC Level 3 Award in the Installation and Maintenance of Heat Pump Systems

Length: 3 days

Eligibility: L2/3 relevant

qualification or several years industry experience plus water regs and bylaws

Level 3 BPEC Domestic Ground Source Heat Pumps

Length: 3 days

Eligibility: Must have relevant NVQ or proven

experience.

Level 3 C&G Award in the Installation and Maintenance of Heat Pump Systems (Non-Refrigerant Circuits)

Length: 1 yea

Eligibility: Qualified professionals in the heating and

plumbing industry.

Level 4

Biomass

BPEC - Solid Biomass (NOS Mapped)

Length: 5 days

Eligibility: Either L2/3 in relevant qualification plus Water Regulations/ Water Byelaws, Energy Efficiency for Domestic Heating, Unvented hot water

Informal

Solar Thermal COLOUR KEY:

Courses offered by training providers within the West of England

Courses not offered by training providers in the West of England but can be accessed outside the region.

Level 3 BPEC Award in the installation and maintenance of solar thermal hot water

Length: 3 days

Eligibility: L2/3 in relevant qualification plus Water Regulations/Water Byelaws and Unvented Domestic Hot Water Storage Systems Level 3 LCL Award in the Installation of Solar Thermal Hot Water System

Length: 3 days

Eligibility: L2/3 in relevant qualification, minimum <u>3</u> <u>years experience</u>, plus Water Regulations/Water Byelaws and Unvented Domestic Hot Water Storage Systems

Level 4 HETAS Biomass Appliance Installer

ever 4 HETA3 Biomass Appliance in

Length: 5days

Eligibility: Either L2/3 in relevant qualification plus Water Regulations/Water Byelaws OR experienced workers can present portfolio of work for approval





Domestic Retrofit (Plumbing and Heating) Pathway

These are some (not all) of the courses available for professionals to train in areas of domestic retrofit.

Further Domestic Retrofit

Informal

Level 1-2

Level 3

COLOUR KEY:

England

Courses offered by training

providers within the West of

Courses not offered by training

England but can be accessed

providers in the West of

outside the region.

Level 4-5

General Retrofit

Retrofit 101 (online)

Length: 2 hours Eligibility: None and it's free

PAS 2030 Standard Awareness (online)

Length: 2 days Eligibility: None

CarbonLite Retrofit Foundation Course (online)

Length: 2 days Eligibility: None

Domestic Retrofit (online)

Length: 3 hours Eligibility: None

Retrofit Delivery (online)

Length: 4 x 3 hour sessions Eligibility: Tailored for contractors, installers, coordinators, assessors and design professionals.

Understanding Building Physics (online)

Length: 10-12 hours across 5 weeks

Eligibility: None

Understanding Non-Domestic Retrofit

Length: 15 hours Eligibility: None

Level 2 Award Understanding

Domestic Retrofit (online) Length: 30hours (self-paced) Eligibility: None

Level 2 Award Introduction to Domestic Renewable Low Carbon Technologies (online)

Length: 1-2 days Eligibility: basic literacy and numeracy

Level 2 Retrofit Skills (mix of online and in-person)

Length: Self-paced Eligibility: 1 year work experience in Construction

Level 2 Certificate in Retrofit

Length: 20 weeks Eligibility: None but experience in Construction is helpful

Level 2 Award for Green Ambassador within the Retrofit Sector (online)

Length: 8-10 weeks Eligibility: Practical experience in the retrofit sector.

Level 2 C&G Award in Retrofit

Length: 3 days part-time Eligibility: None

Retrofit Advisor

Level 3 Certificate in Domestic Retrofit Advice

Length: 30 hours (online) Eligibility: 18+ years

Level 3 Certificate in Retrofit

Length: 20 weeks Eligibility: None but interest in Retrofit Advice is valuable and relevant.

Domestic / Retrofit Energy Assessor

Level 3 Award in Domestic Energy Assessment

Length: Days-Weeks depending on the course Eligibility: No previous qualifications or experience required

Level 3 Certificate for Retrofit Assessors

Length: Days-Weeks depending on the course Eligibility: A Domestic Energy Assessment Qualification

Skills Bootcamp – L4 Award in Domestic Retrofit Assessment

Length: Usually 60 hours across 10 weeks (online) Eligibility: Level 3 Domestic Energy Assessor qualification (if you do not have this already there are combined courses available).

Level 4 Award in Domestic Retrofit Assessment

Length: 80 hours Eligibility: Level 3 Domestic Energy Assessment

Level 4 Award in Assessing Domestic Dwellings for Retrofit

Length: 80 hours Eligibility: Qualified Domestic Energy Assessor

Retrofit Designer Retrofit Coordinator

Level 4-5 Retrofit Designer Course

Length: 80 hours
Eligibility: Either
Qualified and
practising as a
Retrofit
Coordinator OR
Qualified in
architecture,
architectural
technology,
surveying or
construction
management
with experience
in using design

software.

Level 5 CarbonLite Retrofit Coordination (online)

Length: 105 self-paced hours and 2 days live online tutoring. Eligibility: AECB membership, familiar with retrofit projects.

L5 Diploma in Retrofit Coordination and Risk Management

Length: 145hours self-paced (online/in-person)

Eligibility: Usually 2years experience in built environment or a relevant level 3 qualification.

Skills Bootcamp – L5 Diploma in Retrofit Coordination and Risk Management

Length: 103 hours across 13 weeks Eligibility: A level 3 qualification in a built environment

To view training providers offering courses on retrofit in the West of England, click to view our Skills Connect Directory.

