

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
- <u>A Training Directory</u>

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Construction and Trades Pathway

Entry: SWAP Construction Length: 2 weeks

Entry Level

Eligibility: None

Entry: Bootcamps (various e.g. Plant Bootcamp)

Length: Weeks Eligibility: 19+

Entry: Foundation Construction Skills

Length: 1 year

Eligibility: GCSE English and Maths (Grade 2+)

Level 1 BTEC Certificate in Construction

Level 1

Eligibility: None

Construction Skills

Length: 1 year

Eligibility: GCSE (grade 1+) in English and Maths.

Construction Skills

Length: 1 year (part-time)

learners of all ages.

Level 1 - Construction Multi Trades

Length: 1 year

Eligibility: 16-18 years old. 3x GCSEs (Grade 2) including Maths and English

Level 2 - BTEC Certificate T Level 3 in following: in Construction (trade Design, Surveying and Planning for Construction

Control

Length: 2 years

Length: 8 weeks

focus)

Eligibility: 19+ years old and 4x GCSEs (Grade 3+) including Maths and English

Level 2

Level 2 - Construction Skills

Length: 1 year

Eligibility: 4 x GCSEs (Grade 3+) including Maths and English

Level 2 - Property Maintenance Operative

Length: 15 months

Length: unknown Eligibility: level 2 (GCSE 4/C) in English and Maths

> **Level 3 Apprenticeship Building Services Engineering Technician**

Level 3

- Engineering, Manufacturing, Processing and

Eligibility: 16-18 year olds, 4-5x GCSEs (grades 4+)

T Level 3 in Building Services Engineering

Eligibility: 16-18 year olds, 4-5x GCSEs

(grades 4+) including English and Maths

Level 3 - Facilities Management Supervisor

- Maintenance, Installation and Repair for

Engineering and Manufacturing

including English and Maths

for Construction

Length: 2 years

Length: 3 years

Eligibility: Level 2 (grade 4+) in English and Maths

Level 3 BTEC Diploma in Building Services Engineering

Length: 3 years

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

Level 4 Apprenticeship -**Construction Site Supervision**

Level 4

Length: 3-4 years

Eligibility: level 2 (GCSE 4/C) in English and Maths or a relevant level 2 apprenticeship

Level 4 HNC Construction Site Management

Length: 1 year

Eligibility: varies (UCAS points or level 2 qualifications grades 4/C

Level 4 HNC Quantity Surveying BTEC

Length: 1 year

Eligibility: varies (UCAS points or level 2 qualifications grades 4/C

Level 4 Apprenticeship **Construction Management Site** Supervision

Length: 1 year

Eligibility: GCSE English Language grade C/4 and GCSE Maths grade B/5.

Level 4 Apprenticeship Building Services Engineering Senior Technician

Length: 1 year

Eligibility: GCSE English Language grade C/4 and GCSE Maths grade B/5.

Level 5 HNC/HND **Construction and Built** Environment

Level 5

Length: 1 year

Eligibility: varies (UCAS points)

Level 6 NVQ Diploma in **Construction Site Management**

Level 6-7

Length: 1 year

Eligibility: varies (UCAS points)

Level 6 Apprenticeship -**Chartered Surveyor**

Length: 5 years

Eligibility: 2x A levels or a HNC in Construction.

Level 7 Apprenticeship -**Chartered Town Planner**

Length: 4 years

Eligibility: Graduates, or relevant level 3 and experience.

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.



Multi Skills Route

(combined training in areas such as bricklaying, plastering, carpentry etc)

Length: 10 days

Level 1 Diploma in

Level 1 - 'She Builds'

Eligibility: For female

Eligibility: level 2 English and Maths (GCSE 4/C)

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



Construction and Trades Pathway

Trade Routes Entry Level 1 Level 2 Level 3 Level 4+ See accompanying construction Entry 2 Day Intensive Intro to Level 1 Introduction to Bricklaying and retrofit maps for courses Bricklaying Length: 1 year level 4 and above. Level 2 Bricklaying Length: 2 days Eligibility: None Length: 1 year Eligibility: 19+ Eligibility: Either GCSE (grade 2-3+) in both English Level 1 Bricklaying and Maths, or completed Level 1. Bricklaying Diploma Length: 1 year Length: 16 weeks Eligibility: GCSE grade 2 in both English Eligibility: None and Maths Level 1 Brickwork Trade **Level 2 Bricklaying Technical Diploma Bricklaying** Length: 1 year Length: 1 year Eligibility: 16-18 year olds Eligibility: 16-18 years old. Bricklaying Trade Level 1, a minimum of Grade 3+ in both English and Maths. **Level 2 NVQ Trowel Occupations** Length: Unknown Eligibility: Unknown Level 3 Apprenticeship - Craft Bricklayer Level 2 Apprenticeship - Bricklayer Length: 2 years Length: Varies but often 2 years Eligibility: Have or work towards a level 2 Eligibility: Have or work towards a level 2 English English and Maths (GCSE 4/C) and Maths (GCSE 4/C) **Level 2 Stonemasonary Level 3 Stonemasonary** Length: 1 year Length: 1 year Eligibility: Depending on grades and experience you Eligibility: Depending on grades and may beable to enrol at Level 12 or 3. experience you may be able to enrol at Stone-Level 2 or 3. **Level 2 Stonemasonary Standard** masonry Length: 2 years Eligibility: Have or work towards a level 2 English and Maths (GCSE 4/C) **COLOUR KEY:** Courses offered by training providers within the West of England Level 2 Apprenticeship - Groundworker Courses not offered by training To view training providers offering courses on construction in the Length: 1 year Groundwork providers in the West of England but West of England, click to view our Skills Connect Directory. Eligibility: None can be accessed outside the region.



Construction and Trades Pathway

Trade Routes Level 2 **Entry** Level 1 Level 3 Level 4+ See accompanying construction Entry: 2 Day Intensive Intro to Level 1 Carpentry and Joinery Diploma **Level 2 Site Carpentry** and retrofit maps for courses Carpentry Length: 1 year Length: 1 year level 4 and above. Length: 2 days Eligibility: GCSE grade 3 in both English and Eligibility: GCSE grades 3-4 in both English and Eligibility: None Maths. Ideally completed Level 1. **Entry: Carpentry Construction Skills Level 2 Site Carpentry Technical Diploma Level 1 Carpentry Trade** Certificate Length: 1 year Length: 1 year Length: Weeks Eligibility: 16-18 years old. Carpentry Trade Eligibility: 16-18 years old Eligibility: None level 1, and Grade 3 or above in both English and maths. Carpentry Level 3 Apprenticeship - Site Carpentry **Carpentry Taster** Length: 15months and Joinery Level 2 Apprenticeship - Site Carpentry Length: 6 weeks Eligibility: Level 2 Carpentry and Joinery Length: Varies (15months – 2 years) Eligibility: 19+ Apprenticeship Eligibility: Either a qualifying Level 1 qualification or 5x GCSEs (grade 2+ and two at grade 4+) **Level 3 Apprenticeships Craft Carpentry** and Joinery Length: 2 years Level 2 Apprenticeship in Carpentry & Eligibility: Completed Level 2 Joinery Apprenticeship and GCSE grade 2 in both Length: 2 years English and Maths. Eligibility: Have or work towards a Level 1 in maths and English **Plastering Technical** Entry 2 Day Intensive Intro to **Level 1 Plastering Trade** Length: 1 year Plastering Length: 1 year Eligibility: 16-18 years old. Plastering Trade Length: 2 days Eligibility: 16-18 Level 1 and a Grade 3+ in both English and Eligibility: None Maths **Level 1 Plastering COLOUR KEY: Plastering Diploma** Length: 1 year **Plastering** Level 2 Plastering Length: 16 weeks Courses offered by training Eligibility: GCSE grade 2 in both English and Length: 1 year providers within the West of England Eligibility: None Eligibility: GCSE grade 2-3+ in both English Courses not offered by training and Maths. Ideally level 1 or demonstrable providers in the West of England but knowledge. can be accessed outside the region. Level 2 Apprenticeship - Plasterer To view training providers offering courses on construction in the Length: Unknown West of England, click to view our Skills Connect Directory. Eligibility: Unknown



Construction and Trades Pathways

Trade Routes Level 1 Level 2 Level 3+ Level 2 Apprenticeship - Scaffolder See accompanying construction and retrofit maps for courses Length: 18 months Scaffolding level 3 and above. Eligibility: A minimum of five GCSEs at grade 9-2 with at least two at grade 4, or a qualifying Level 1 qualification. Level 2 MAG Welding Skills Award Level 1 MAG Welding Skills Award Length: Unknown Length: 8 weeks Eligibility: Unknown Eligibility: none Level 1 MMA Welding Skills Award Level 2 MMA Welding Skills Award Length: Unknown Length: Unknown Eligibility: Unknown Eligibility: Unknown Level 2 TIG Welding Skills Award Level 1 TIG Welding Skills Award Welding Length: Unknown Length: Unknown Eligibility: Unknown Eligibility: Unknown Level 2 TIG Aluminium Welding Skills Award Length: Unknown Eligibility: Unknown Level 2 Oxy-Acetylene Welding Skills Award Length: Unknown Eligibility: Unknown **COLOUR KEY:** Courses offered by training Level 2 Apprenticeship – General Welder providers within the West of England Length: 18 months Courses not offered by training Eligibility: To have or work towards a Level 2 in providers in the West of England but **English and Maths** can be accessed outside the region. **Plumbing** See separate Retrofit maps for full details. and Heating

> **R€TR®F/T** West

Electrical



Construction and Trades Pathways into Retrofit

Level 3 Level 2 **Entry Level 3 Apprenticeship Smart Home** Level 1 Award in Energy Efficiency and Level 3 Apprenticeship in Smart Home Level 2 LCL Award Certificate in the Principles of Metering for **Technician Metering** Technician Sustainability **Renewable Heat Installations** Length: 21 months Length: 1.5 years Length: 1 day Length: 3 weeks Eligibility: Relevant employment GCSE Eligibility: None Eligibility: GCSE English and Maths Eligibility: None **English and Maths** Level 3 Certificate in Domestic on Level 2 Apprenticeship in Dual Fuel Smart Meter Installer **Introduction to Domestic Energy** Level 3 Energy Efficiency (Part L) Construction Energy Assessment (online) Length: 14months Assessment (online) **Training Course Energy** Eligibility: GCSE English and Maths Length: 1 day Length: 4 days Length: Self-paced **Efficiency** Eligibility: Experienced installers and/or Eligibility: 18+ Eligibility: None design engineers. Level 2 LCL Award Diploma in Smart Metering Level 3 C&G Certificate in Domestic Energy Length: 1 year Level 3 ABBE Award in Domestic Energy Assessment (online) Eligibility: Working for an energy supplier Assessment (online) Length: 5 days Length: 5 days Eligibility: None Eligibility: None To view training providers offering courses on energy efficiency in Level 3 Award in Energy Efficiency for Level 3 Certificate in Surveying and **Older and Traditional Buildings Calculation of Building Heat Loss** the West of England, click to view our Skills Connect Directory. Length: Usually 2 days (online) Length: 3 days Eligibility: Working within an energy Eligibility: None assessment role Level 3 Level 1 Level 2 Level 2 in Understanding Carbon Level 3 in Energy Awareness (online) **Awareness and Energy Management COLOUR KEY:** Length: 20 hours self-paced Length: 1 day Eligibility: None providers within the West of England Eligibility: None

Energy Management

Level 1 Certificate in Energy Management Essentials

Length: 60 hours

Eligibility: GCSE English and Maths or equivalent and experience using Microsoft Excel

Level 2 Energy Management **Professional**

Length: 200 hours

Eligibility: 2+ years' relevant experience or completion of the Level 1 Certificate in Energy Management Essentials

Continuous Professional Development

(CPD) short courses in energy efficiency/management include:

Metering Monitoring **Energy Auditing and Report Writing** Courses offered by training

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





Domestic Retrofit (Construction) 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 <u>Skills Connect Directory</u>.





Construction Trades Pathways into Retrofit

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

Level 2 Level 3 **Entry** Level 2 Award in Introduction to Level 2 Award in recognising damp, mould, **Cold Roof Insulation** Level 3 NVQ Thermal Insulation **External Wall Insulation** and condensation in buildings Length: Self-paced Online (hours) Length: unknown Length: unknown Eligibility: None Eligibility: unknown Length: Self paced (online) Eligibility: unknown Eligibility: None **Warm Roof Insulation** Level 2 NVQ Internal Insulation Level 2 NVQ Thermal Insulation in either -Length: Self-paced Online (hours) **Fabricate Protection or Fit Protection** Length: unknown Eligibility: None Eligibility: unknown Length: unknown Eligibility: unknown **Underfloor Insulation Level 2 NVQ Cavity Wall Insulation** Length: Self-paced Online (hours) Level 2 NVQ Cold Roof Insulation Eligibility: None Length: unknown Length: unknown Eligibility: unknown **Insulation &** Eligibility: unknown Introduction to Insulation **Building** Length: Self-paced Online (hours) **Level 2 NVQ Warm Roof Insulation** Level 2 NVQ in Insulation and Building Eligibility: None Treatments **Treatment** Length: unknown Length: 10 hours (online) Eligibility: unknown **Working Safely in Lofts** Eligibility: Level 2 qualification in fitting relevant measures. Length: Self-paced Online (hours) COLOUR KEY: Eligibility: None Courses offered by training providers within the West of England **Draught Proofing** Courses not offered by training Length: Self-paced Online (hours) providers in the West of England but Eligibility: None can be accessed outside the region.

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





Electrotechnical Pathway

HOW TO GUIDE

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

Informal

Level 1-2

Level 4-5

Level 6-7

Key Stage Electrical Course

Length: 5 days Eligibility: None

Level 1 Introduction to Electrical Installation

Length: 1year
Eligibility: 4+ GCSE
including a grade

3(D) in Maths

Level 2 Electrical Installation

Length: 1 year Eligibility: 4+ GCSE (grade 4 or above) including Maths

Level 3 NVQ Diploma in Installing Electrotechnical Systems & Equipment (Building, Structures or Environment) from EAL or City &

Length: Usually 3-4 years Eligibility: GCSE grade 4+ in English and Maths.

Level 2 City & Guilds Technical Certificate in Building Services (Electrical Installation Route)

Length 1year

Eligibility: GCSE English and Maths at Grade 4

Level 3 City & Guilds Advanced Technical Diploma in Building Services (Electrical Installation Route)

Length 2years

Eligibility: Level 2 Technical Certificate or 4 GCSEs at grades 5+ including English and Maths

Level 3 Apprenticeship Domestic Electrician

Length: Usually 3-4 years

Eligibility: GCSE grade 4+ in English and Maths. Employed with an appropriate employer.

Level 3 Apprenticeship Installation & Maintenance Electrician

Length: Usually 3-4 years

Eligibility: GCSE grade 4+ in English and Maths. Employed with an appropriate employer.

Retrofit Training

Level 3

Eligibility: varies for each course

Installation courses usually require a Level 2 or 3 qualification.

Level 3 Certificate in installation and maintenance of:

- Solar PV
- Electrical Storage Systems
- EV Charging Points

Informal retrofit courses for Continuous Professional Development (CPD)

Informal retrofit courses for Continuous Professional Development (CPD)

Retrofit Skills Bootcamps

Accredited courses in the new retrofit roles

View details on the Retrofit Map overleaf.

Level 4 Higher National Certificate (HNC) Electrical and Electronic Engineering

Length: 2 years

Eligibility: Various depending on experience and qualifications.

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 5 Higher National Certificate (HNC) Electrical and Electronic Engineering

Length: 1 year

Eligibility: HNC Engineering or equivalent qualifications with Grade C/4 including English and Maths.

Level 6 BEng Electrical and Electronic Engineering Length: 3 years Eligibility: UCAS points

Level 7 MEng Electrical and Electronic Engineering Length: 4 years Eligibility: UCAS points

Level 6 BEng Mechanical and Electrical Engineering Length: 3 years Eligibility: UCAS points

> Level 7 MEng Mechanical and Electrical Engineering Length: 4 years Eligibility: UCAS points

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

16-18 years old ...

Level 3 T Level in Building Services Engineering for Construction specialising in Electrical

Length: 2years

Eligibility: 16-19-year-olds, 4+ GCSEs in grades 4(C) or equivalent, including English and Maths

For more information, or to speak to an advisor visit

www.skillsconnect.org.uk

RETR®F/T West

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.

Continuous Professional Development (CPD) short courses for experienced electricians, examples include:

Level 2/3 Inspection and Testing (5 days) Level 3 Award in the Initial Verification and Certification of Electrical Installations (4 days) Level 3 Certificate in Building Regulations



Domestic Retrofit (Electrotechnical) Pathway

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

Solar PV

Energy

Storage

Informal

Level 3

Level 7

Level 7 in Solar Industry Leader Programme

Eligibility: Working in a leadership role within

Length: 18months

a solar company

Solar Photovoltaic Maintenance

Length: 2 days Eligibility: No formal requirements, recommended to have qualification in inspection and testing, and current edition of wiring regulations.

Level 3 LCL Award in Installation and Maintenance of Small Scale Solar Photovoltaic Systems

Length: 3 days Eligibility: Level 3 Award Requirements for Electrical Installations plus Level 3 Award in the Initial Verification & Certification of Electrical Installations (or combined

award including Periodic Inspection & Testing)

Level 3 LCL Award in Small Scale Solar Photovoltaic Systems and Electrical Energy Storage Systems

Length: 5 days

Eligibility: Qualified electrician.

Level 3 BPEC Award in Solar Photovoltaic Systems

Length: 3 days

Eligibility: NVQ in electrical installation or earlier

equivalent certification.

Level 3 C&G Award in the Installation and Maintenance of Small Scale Solar Photovoltaic Systems

Length: 1 year part-time

Eligibility: Qualified or experienced in a relevant trade.

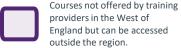
Level 3 EAL Award in the Installation of Small Scale Solar **Photovoltaic Systems**

Length: 4-5 days

Eligibility: good knowledge of the latest edition of BS7671, of inspection, testing and certification of electrical installations

COLOUR KEY:





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

Informal

Electrical Energy Storage Systems Fundamentals (online)

Length: 1 day

Eligibility: Basic understanding of electrical installation principles.

Level 3 BPEC Award in the Design and Installation and **Commissioning of Electrical Energy Storage Systems**

Length: 2.5 days

Eligibility: Level 3 in relevant electrotechnical qualification plus ECS Gold card, JIB Electrician or Approved Electrician Card

Level 3 C&G Award in the Design and Installation and **Commissioning of Electrical Energy Storage Systems**

Length: 3 days

Eligibility: Level 3 electrotechnical qualification.

Level 3 LCL Award: Design, Installation and Commissioning of Electrical Energy Storage Systems

Level 3

Length: 3 days

Eligibility: Level 3 Award in the Requirements for Electrical Installations plus Level 3 Award in the Initial Verification and Certification of Electrical Installations (or a combined award including Periodic Inspection & Testing)

Level 3 EAL Award in the Design and Installation and **Commissioning of Electrical Energy Storage Systems** (EESS)

Length: 3.5 days

Eligibility: Level 3 Award in the Requirements for Electrical Installations plus Level 3 Award in the Initial Verification and Certification of Electrical Installations (or a combined award including Periodic Inspection & Testing)

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





Domestic Retrofit (Electrotechnical) Pathway

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

Informal

Electric Vehicle Charging Installations Fundamentals (online)

Length: 1 day

Eligibility: No formal requirements.

Electric Vehicle Charging

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

Level 3 C&G Award in the design and Installation of domestic and small commercial electric vehicle charging installation

Length: 2 days

Eligibility: Candidates need to be experienced in electrical installation practices, inspection and testing and certification of electrical installations.

Level 3 EAL Award in the Requirements for the Installation of Electric Vehicle Charging Points

Length: 2 days

Eligibility: Competent electrician with relevant Level 3 qualification

or ECS gold card

Level 3 LCL Award in the Installation and Commissioning of Electric Vehicle Charging Equipment in Domestic, Commercial and Industrial Locations

Length: 2 days

Eligibility: Competent electrician with relevant Level 3 qualification.

Level 3 EAL Award Technical Specialist in the Installation of Electric Vehicle Charging Equipment

Length: 12 hours

Eligibility: Competent electrician with relevant Level 3 qualification.

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

Level 3 C&G Award in Domestic, Commercial & Industrial EV Charging Equipment Installation

Length: 2 days

Eligibility: Candidates need to be already experienced in electrical installation practices, inspection and testing and certification of electrical installations.

Level 3 EAL Award in the Requirements for the Installation of Electric Vehicle Charging Points

Length: 2 days

Eligibility: 18+ with experience of installing PVC and SWA cable and up to date knowledge of wiring regulations.

Level 3 EAL Award in the Installation of Electric Vehicle Charging Points

Length: 1 day

Eligibility: Qualified electrician.

Skills Bootcamp: Level 3 Electric Charging Point

Length: 60+ hours

Eligibility: 19+, practicing electrician with Level 3 qualification





Domestic Retrofit (Electrotechnical) 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

Understanding Non-Domestic

Length: 15 hours Eligibility: None

Eligibility: None

Retrofit

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

L5 Diploma in Retrofit Coordination and Risk Management

projects.

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.





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

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

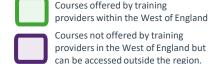
18 years, grade 3+

in maths and

Length: 1 year

Eligibility: 16-

English



Length: Usually 3-4 years

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)

Eligibility: Qualified professionals in the heating and

plumbing industry.

Length: 5days

Level 4

Eligibility: Either L2/3 in relevant qualification plus

Water Regulations/Water Byelaws OR experienced

workers can present portfolio of work for approval

Level 4 HETAS Biomass Appliance Installer

Biomass

BPEC - Solid Biomass (NOS Mapped)

COLOUR KEY:

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**

Courses offered by training providers within the West of

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

Thermal Hot Water System Length: 3 days

Eligibility: L2/3 in relevant qualification, minimum 3 years experience, plus Water Regulations/Water

Level 3 LCL Award in the Installation of Solar

Byelaws and Unvented Domestic Hot Water Storage Systems

RETRÔFIT



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

weeks Eligibility: None

Understanding Non-Domestic Retrofit

Length: 15 hours Eligibility: None

Level 2 Award Understanding

Domestic Retrofit (online)
Length: 30hours (self-paced)

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 <u>Skills Connect Directory</u>.

