HBXL 'CAD Skills for construction' Skills Bootcamp
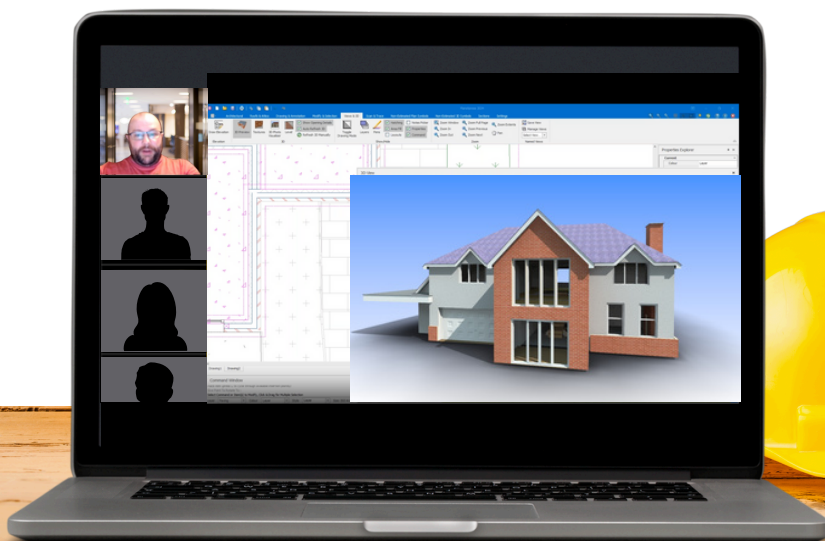
"YOUR CONFIDENCE LEVELS RISE.

Contents

POWER UP YOUR POTENTIAL

Your Skills | Your Business | Your Future

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Get skilled. Get results.

The Skills Bootcamp **'CAD for Construction'** from the HBXL Skills Academy is designed for builders, tradespeople, and aspiring CAD technicians who want to boost their income and career prospects.

During the online Skills Bootcamp, you'll use HBXL's PlansXpress software to learn to create professional 2D and 3D plans, elevations, and visualisations.

Whether you run a building company and want to offer design services, or you're aiming for a career as a CAD technician, this practical Skills Bootcamp gives you the skills, confidence, and knowledge to deliver high quality projects.

By the end of each practical session, you'll have real, usable skills that boost your business and give you a competitive edge in the construction industry.
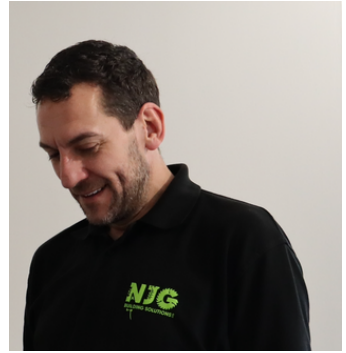
"The Skills Bootcamp hasn't just improved outcomes; it's redefined our future. This isn't just outstanding. It's truly transformational."

"We're now able to offer clients a new level of reassurance. Every measurement, every data point is built on a foundation of truth… It's where pictures begin to tell a thousand words."
Neil, NJG Building Solutions

What you'll gain from this unique CAD for Construction Skills Bootcamp

The most successful builders and CAD technicians are the ones who combine technical skills with business awareness, produce high-quality professional work, and deliver projects efficiently. They understand design, planning, and costing, and use digital tools to gain an edge. The **HBXL CAD for Construction Skills Bootcamp** lays the foundations for becoming a designer - through practical, hands-on training.

If you want to turn your designs into revenue, enhance your career, or grow your business, by the end of the course you'll be able to:

- Interpret and analyse construction drawings, including scales, symbols, paper sizes, and supporting information

- Create accurate 2D plans and 3D models for new builds, extensions, loft conversions, and more using transferable skills gained from using PlansXpress industry-standard CAD platform

- Import CAD files into EstimatorXpress to perform material take-offs and produce professional cost estimates

- Link designs to customer quotes, building regulation notes, and project documentation

- Understand how design choices impact project costs, timelines, and outcomes

- Recognise core Health & Safety requirements, including CDM 2015 regulations, and the responsibilities of key duty holders

- Deliver clear, engaging presentations to showcase designs, estimates, or project proposals

- Stay ahead using digital construction tools and practical BIM techniques to improve efficiency and accuracy.

Ultimately, you'll gain practical CAD skills and the ability to supply a likely cost for the works. You'll have the confidence to manage projects, deliver professional designs, and take your business or career to the next level.

What you learn on the Skills Bootcamp

- **60 guided learning hours**
- **2 hours, twice a week, remote online**
- **3.30pm-5.30pm**
- **Plus 60 hours of self-study**
- **Doesn't include weekends or Public Holidays**

*We also offer a condensed **Impact Course** once or twice a year. This is made up of four hours, 2.00pm-6.00pm, twice a week, and takes fewer weeks.*

The **CAD for Construction Skills Bootcamp** combines practical experience with essential industry knowledge to support confident project delivery and profitable business growth. Here's the running order.

Introduction to the course

You are introduced to the course structure and learning objectives, as we set the scene for success. This initial module establishes the key outcomes and the resources available to support you throughout the Skills Bootcamp.

Benefits of Digitisation in Construction

You are introduced to how technology is transforming efficiency and accuracy through joined up thinking, and gain an appreciation of how integrated software solutions and BIM can enhance project outcomes e.g. through the integration of CAD, estimating and project management processes.

"The team are friendly and very knowledgeable."

Introduction to the Built Environment

You are introduced to industry standards and best practices, along with the resources and micro-credentials available. You learn about Building Regulations and health & safety compliance.

How to read plans - undersanding construction drawings

This module develops an understanding of the types and roles of construction drawings and their critical importance in the building process. You explore the different types of drawings, key considerations when reading or drafting drawings, and the importance of using correct scales and paper sizes. You learn where to find or position essential additional information and understand the significance of error checking and effective communication across the construction team. Critical thinking skills will be fostered to help you analyse and interpret plans effectively, as well as identify where to seek further information when needed.

Introduction to CAD software - the basics

By the end of this module, you will be able to set up a drawing canvas in PlansXpress ready to create accurate CAD drawings. They will understand the software's key functions and its intended applications, navigate its layout and tools, apply shortcut keys for efficiency, plot designs using construction lines, and specify and position construction elements to produce drawings suitable for planning and design purposes.

Developing CAD skills to generate 4 case study projects case study

The basics module is followed by hands-on practice through a series of case studies:
- New Build – creating 2D plans and developing 3D models
- Home Extension – applying CAD tools to smaller, bespoke projects
- Loft Conversion – tackling increased design complexity
- Personal project – using all developed skills applied to your own project.

Undertaking an estimate take-off

By the end of this module, you will be able to set up and use EstimatorXpress to create accurate cost estimates by importing PlansXpress CAD files, refining data, and producing a simple customer quote with accompanying building regulation notes, while gaining a basic understanding of how design inputs affect project cost.

Introduction to Health & Safety
You will gain an understanding of the fundamentals of health and safety within the UK construction industry. We explain the governing bodies, key legislation, and management systems that ensure safe practices. You explore the importance of health and safety, how it can be effectively implemented, and the roles and responsibilities during a project. Additionally, you will develop awareness of the consequences of non-compliance, including legal and financial penalties, and understand how legislation impacts health, safety, and welfare outcomes in the built environment.

Introduction to CDM 2015
This module provides an introduction to the Construction (Design and Management) Regulations 2015 (CDM 2015), exploring their purpose and scope within the construction industry. You will gain an understanding of the key duty holders, including the specific responsibilities of Designers and Principal Designers. The module also explains what constitutes a 'notifiable' project and highlights the three essential documents used to ensure compliance and effective management of health and safety throughout a construction project. It also introduces the RAG methodology of design risk mitigation.

Presentation Skills
By the end of this module, you will be able to recognise the features of an effective presentation, identify your personal skills and key selling points, and create a simple presentation using digital tools such as Canva or PowerPoint to enhance your personal development, grow your business, and showcase your design skills and CAD portfolio.

"You will get so much more out of it then you'd expect."

CAD for Construction Skills Bootcamp Modules	Guided hours
Introduction to course	2
Benefits of digitisation in construction	2
Introduction to the Built Environment	4
How to read plans - understanding construction drawings	4
Introduction to CAD software - the basics	2
New build - case study	16
Home extension - case study	6
Loft Conversion - case study	8
Portfolio development	4
Undertaking an estimate take-off	4
Introduction to Health & Safety	2
Introduction to CDM 2015	2
Presentation Skills	4

How is the Skills Bootcamp delivered?

It's delivered remotely, online. The lessons are live-streamed and recorded (so on the odd occasion you miss a session you can catch up - or rewatch content you want reminding of). Trainees also undertake self-study ahead of the next lesson.

How long is the Skills Bootcamp?

The course is 60 hours in total. And that's typically made up of two hours, 3.30pm-5.30pm, twice a week (doesn't include weekends or Public Holidays). We also offer a condensed **Impact Course** once or twice a year. This is made up of four hours, 2.00pm-6.00pm, twice a week, and takes fewer weeks.

How is the Skills Bootcamp funded?

The HBXL Skills Bootcamps are funded by the Department for Education (DfE) so they, in conjunction with the regions they're working with, set the parameters. Not all regions of the UK offer funding. Please look at our website for the current local authorities supporting us.

The courses are fully funded if you're self-employed or a sole trader/owner of a small business that doesn't have a payroll. Alternatively, they're 90% funded if you're an SME Limited company with a payroll – you pay 10%. If you were paying yourself, you'd be looking at £3900-£4400+VAT depending on the region.

What do you receive at the end?

- Certificate of Attendance
- Portfolio of drawing projects
- Ongoing support for 6 months
- Discounts on digital solutions used during the course
- And many new skills learnt on the course!

Am I eligible?

You need to meet the government's requirements for becoming a Skills Bootcamp learner. There is an application process, and places are limited to give each trainee the necessary 1-2-1 time.

- Are you 19+?
- Have you been resident in the UK for 3 years?
- Do you reside in one of the geographic regions supported and funded? The courses are delivered remotely online but trainees must either live or be working on construction projects in funded locations.
- Can you confirm that you are not in any Government funded Further Education or Apprenticeship scheme? (It's OK to be self-funded however)?
- Can you confirm that you haven't attended another Skills Bootcamp within the last 12 months?
- Do you have construction experience? It's preferred but not essential.

How do I apply?

If you would like to enrol on the Skills Bootcamp (or know someone who would) please call 0117 916 7870, look around the website skillsacademy.hbxl.co.uk, or complete the enquiry form here.

Scan to complete enquiry form

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