

# CAD FOR CONSTRUCTION

## SKILLS BOOTCAMP

**SKILLS  
FOR LIFE**

**SKILLS  
BOOTCAMPS**

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## INTRODUCTIONS

- Course outline
- Expectations on attendance
- Learner goals and expectations / Professional Development Plan
- Learning style survey
- How to submit home work
- Software check - EstimatorXpress / PlansXpress / Health & Safety Xpert

## INTRODUCTION TO BUILT ENVIRONMENT

- What makes a building work
- Understanding the client's brief
- Understanding the site
- Introduction to building regulations

## BENEFITS OF DIGITISATION 'BIM AWARENESS'

- Introduction to reading building plans
- Introduction to BIM (Building Information Modelling)
- Connected projects and productivity improvements

## GETTING STARTED WITH DIGITAL DESIGN USING PLANSXPRESS

- Introduction to PlansXpress and typical use cases - what is PlansXpress?
- Creating a new drawing and choosing your template
- Orientation to PlansXpress (tabs and docked windows)
- Basic drawing techniques (different shapes / moving items / copying & pasting / undo & redo)
- Importing PDFs to take-off into PlansXpress
- Drawing Construction Lines

## DRAWING THE GROUND FLOOR EXTERNAL ENVELOPE

- Drawing External Walls - ground floor
- Drawing Internal Walls - ground floor
- Placing Doors - ground floor
- Placing Windows - ground floor
- Inserting Stairs (and different configurations)
- Adding the ground Floor Slab

## DRAWING THE FIRST FLOOR

- Understanding levels
- Drawing External Walls by copying ground floor - to first floor
- Modifying first floor External Walls (different first floor to ground floor)
- Adding the Suspended Floor - to first floor
- Drawing the Internal Walls - to first floor
- Placing Doors - to first floor
- Placing Windows - to first floor

## DRAWING THE ROOF

- Drawing and editing of the Lean-to Roof
- Drawing and editing of the Main Roof
- Exploration of alternative roof types

## ADDING DETAIL TO YOUR PLANS

## PRODUCING 3D MODELS

## READING BUILDING PLANS

- Building plan types
- How to read building plans (examining types/styles of drawings for varying residential project types)
- Communicating intent to contractors/manufacturers through plans
- Planning permission process

## PROJECT CASE STUDY - APPLYING SKILLS TO AN EXTENSION

## PROJECT CASE STUDY - APPLYING SKILLS TO A LOFT

## PROJECT COSTING & MATERIALS TAKE-OFFS

## PORTFOLIO DEVELOPMENT OF 4 PROJECTS - NEW BUILD / EXTENSION / LOFT / OWN HOME

## PRESENTATION SKILLS

## HEALTH & SAFETY IN CONSTRUCTION - IDENTIFYING RISK WHEN DESIGNING

Introduction to H&S in Construction

Understanding Construction (Design Management) regulations 2015

Understanding Duty Holders Responsibilities, notification, 3 key documents projects

Understanding the principle of Design Risk Management & RAG

## FINAL SUBMISSION OF PROJECTS

To register your interest in future courses, or to apply to this Skills Bootcamp please call **0117 916 7870** or email **[application-enquiries@hbxl.co.uk](mailto:application-enquiries@hbxl.co.uk)**, providing your name and phone number.

