

2020/2021

**T3**  
**TRAINING &  
DEVELOPMENT**

Training in Architecture  
Engineering & Construction

# TRAINING BROCHURE

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# OVERVIEW

## ABOUT US

We are an Independent National Training Provider offering a variety of Apprenticeship Programmes at Level 2, 3 & 4. We also offer online learning, short courses, evening courses and bespoke training at our training centre in Barnsley, Kent, online or on site/in the workplace. All our training is aimed at the Architectural, Engineering & Construction sectors and is delivered by our team of industry experts.

We needed to address the significant lack of formal/specialist training in the construction industry for engineers and technicians. Therefore, we have developed a unique and intensive specialist training programme along with high quality training and assessment methods to deliver apprentices into the workplace with the skills, knowledge and understanding required of their job role.

We have built upon the experience of our founding companies and director to build programmes that bring value to your business and are tailored to meet the needs of the learners and the employers. Our aim is to bridge the gap between young talent and experience to deliver apprentices into the workplace ready to deliver whilst educating and inspiring them to succeed in this industry.

We are a private training provider with the flexibility to offer bespoke training and development to meet your business's needs. Organisational Needs Analysis meetings are offered to support employers review their companies training & development requirements and create a plan of how we can support.

We now offer a range of business related apprenticeships to support all the companies we work with these include Business Administration, Customer Services, Team Leader, Operations Manager and Assessor/Coach.

## CONTACT DETAILS

Head office: c/o BBIC, Innovation Way, Barnsley, S75 1JL

Training Suite: Think Low Carbon Centre, Honeywell Lane, Barnsley, S75 1BP

Telephone: 01226 610201 Email: [training@t3-training.com](mailto:training@t3-training.com) Website: [www.t3-training.com](http://www.t3-training.com)

## APPRENTICESHIPS

### WHY CHOOSE T3 TRAINING & DEVELOPMENT

- Unique specialist training programme available to all apprentices
- Programmes designed and delivered by industry experts
- High quality training and assessment methods
- ESFA approved training provider
- Approved centre with ECITB, Pearson & NOCN
- Flexible delivery options
- Good feedback from employers and apprentices
- Free Apprenticeship Recruitment Service
- Dedicated Learner Support Officer
- Apprentices can start anytime
- Progression routes available Level 3 to Level 4
- Support available for apprentices with additional learning needs

### BENEFITS OF RECRUITING AN APPRENTICE

- £1000 incentive for recruiting a 16-18 year old
- Access to unique specialist training programmes
- Learning plans created to support your business needs
- Address the industry skills gap
- Deliver apprentices into the workplace ready to deliver
- Additional Government incentives for all ages available from 1<sup>st</sup> September 2020 to 31<sup>st</sup> March 2021 for recruiting a new apprentice.

## ADDITIONAL BENEFITS

We offer assistance in finding and recruiting your apprentice by advertising, sifting, pre-interviewing and approving suitable learners for you to recruit. This is all free of charge.

We offer front loaded intensive specialist training options by industry experts to allow new starts to hit the ground running followed by continued support and assessment from our team.

Apprenticeships can start anytime. Our block training options are programmed in throughout the year for apprentices to enrol on. Specialist training is optional and can be attended in modules and blocks to meet your needs on a week by week basis. Progression to a Higher Apprenticeship, HNC or Degree is an option on completion of an apprenticeship.

We offer a traineeship programme for young people looking for an apprenticeship or employment which provides them with the specialist digital skills they will require in the Architectural, Engineering & Construction Sector. This programme allows employers to trial candidates by offering a 6 week work experience placement before offering an apprenticeship vacancy.

## SHORT COURSES

We offer a range of specialist short courses aimed at the AEC Sector. With flexible delivery options on and off site and also on an evening. We have a suite of courses available through a virtual learning platform where candidates can complete courses online at their own pace.

Funding may be available to you through local funding bodies or grants.

We can offer tailored training courses to meet your company requirements so if the course you require isn't listed please contact us.

## APPRENTICESHIPS

### COSTS

Employer	You Pay	Government Pays	Incentives Paid
<b>Apprenticeship Levy</b>	The full cost of the training from your digital account	90% of any costs your digital account will not cover	£1000 for recruiting a 16-18 year old apprentice or 19-24 with an Education Health Care Plan (EHC)
<b>Non Levy Paying Employer (50+ employees)</b>	5% of the apprenticeship training costs	95% of the apprenticeship training costs	£1000 for recruiting a 16-18 year old apprentice or 19-24 with an EHC Plan
<b>Non Levy Paying Employer (1-49 employees)</b>	No cost for apprenticeship training for 16-18 year olds and 19-24 with an EHC. 5% cost paid for all other apprentices	100% of the apprenticeship training costs for 16-18 year olds and 19-24 with an EHC. 95% of the apprenticeship training costs for all other apprentices	£1000 for recruiting a 16-18 year old apprentice or 19-24 with an EHC Plan

# DESIGN & DRAUGHTING APPRENTICESHIP STANDARD LEVEL 3

## SUITABLE FOR:

CAD Technician, Reinforcement Engineer, Architectural Technologist, Design Assistant, Structural Engineering Technician, BIM Technician, Draughtsperson or M&E Technician.

The units are suitable for structural, electrical, control and instrumentation, mechanical and piping Design and Draughtspersons.

## LEARNING OUTCOME:

The apprentice will be trained in aspects of disciplines such as principles of design, identify and analyse design options and selecting the appropriate design, types of drawings and specifications, characteristics of materials, producing drawings using appropriate computer aided design packages such as AutoCAD, Revit and/or Tekla and abbreviations and symbols used in design and draughting.

## QUALIFICATION AND TRAINING

- 2 ½ Year Apprenticeship Programme
- Design and Draughting Skills, Knowledge & Behaviours – *delivered in the workplace*
- Level 3 BTEC in Construction and the Built Environment – *Day Release or Remote Delivery*
- Specialist Training Programme Blocks of your choice (*see page 24*)
- End Point Assessment – Knowledge Test, Practical Test and Presentation/Interview

# DIGITAL ENGINEERING TECHNICIAN APPRENTICESHIP STANDARD LEVEL 3

## SUITABLE FOR:

Digital Engineering/Construction Technician, CAD Technician, Reinforcement Engineer, Architectural Technicians, Design Assistant, Structural Engineering Technician, BIM Technician or Draughtsperson, Surveyors or Site Engineers

## LEARNING OUTCOME:

The conclusion of Digital Construction/Engineering Fundamentals will leave the Learner with knowledge of BIM and the type of data that can be contained within a BIM model and its use throughout the project lifecycle. It will provide hands on training so that the learner can create a BIM model and manipulate, review and manage external models.

Learners will also develop an understanding of design control and workflows including a practical workshop showing how this will be managed using BIM tools to appropriate Standards.

## QUALIFICATION AND TRAINING

- 2 ½ Year Apprenticeship Programme
- Digital Engineering Skills, Knowledge & Behaviours – *delivered in the workplace*
- NVQ Level 3 Built Environment Design – *assessed in the workplace*
- Level 3 BTEC in Construction and the Built Environment – *Day Release or Remote Delivery*
- Specialist Training Programme Blocks of your choice (*see page 24*)
- End Point Assessment – Practical and Structured Interview



# PROJECT CONTROLS TECHNICIAN APPRENTICESHIP STANDARD LEVEL 3

## SUITABLE FOR:

Project Control, Operational Management, Project Engineers, Planners, Logistics Control, QS, Post Graduates, Junior Management

## LEARNING OUTCOME:

The learner will be trained in all fundamental aspects of project control, such as the project processes, document controls, the procurement process, estimating, planning and scheduling, cost control and monitoring, project optimisation and risk analysis.

The training can improve project performance capability – quality, cost and delivery – leading to a direct impact on defined project outcomes.

## QUALIFICATION AND TRAINING

- 2 ½ Year Apprenticeship Programme
- Level 3 Diploma in Project Controls Practice and Techniques - *delivered in the workplace*
- Facilitated training in the workplace to suit your requirements including, for example:
  - Effective communication and behaviour
  - Fundamentals of project control
  - Estimating, planning, cost techniques and commercial awareness
  - Procurement activities
  - Risk and opportunity management
  - Lean optimisation practice and techniques
  - Scheduling practice and techniques
  - Scope interpretation and project controls planning
  - Roles & responsibilities
  - Work, cost breakdown and coding structures
  - I. T. software and data controls

# CIVIL ENGINEERING TECHNICIAN APPRENTICESHIP STANDARD LEVEL 3

## SUITABLE FOR:

A Civil Engineering Technician provides technical support to engineers and other construction professionals in the design, development, construction, commissioning, decommissioning, operation or maintenance of the built environment and infrastructure. Technicians will have a broad skills base to work in areas which include sustainable construction, structural integrity, geotechnics, materials, waste management, flood management, transportation and power.

## LEARNING OUTCOME:

The learner will be trained in all aspects of civil engineering such as:

- AutoCAD
- BIM
- Project management
- Surveying
- Engineering techniques
- Design and construction processes
- Sustainability.

## QUALIFICATION AND TRAINING

- 2 ½ Year Apprenticeship Programme
- Civil Engineering Skills, Knowledge & Behaviours – *assessed in the workplace*
- Level 3 BTEC in Construction and the Built Environment – *Day Release or Remote Delivery*
- Specialist Training Programme Blocks of your choice (*see page 24*)
- End Point Assessment -Presentation and questioning on a project brief and a written report and structured interview

# SURVEYING TECHNICIAN APPRENTICESHIP STANDARD LEVEL 3

## SUITABLE FOR:

The types of Surveying Technician included are: Building Surveying, Property Surveying, Land Surveying, Quantity Surveying Technician. The main duties include collecting information, take appropriate measurements, meet with other professionals, collect and record data, manage work tasks, undertake costings and ensure safe working environments.

## LEARNING OUTCOME:

The learner will be trained in all aspects of surveying such as:

- Law
- Data Collection
- Economics
- Construction Technology
- Surveying
- Sustainability

## QUALIFICATION AND TRAINING

- 2 ½ Year Apprenticeship Programme
- Surveying Technician Skills, Knowledge & Behaviours – *assessed in the workplace*
- Level 3 Diploma in Surveying – *Day Release or Remote Delivery*
- Specialist Training Programme Blocks of your choice (*see page 24*)
- End Point Assessment – Portfolio of Evidence, a case study and work experience report

# CONSTRUCTION DESIGN & BUILD TECHNICIAN - HIGHER APPRENTICESHIP LEVEL 4

## SUITABLE FOR:

CAD Technician, Reinforcement Engineer, Architectural Assistant, Design Assistant, Structural Engineering Technician, BIM Technician, Draughtsperson, Design Co-ordinator/Manager

## LEARNING OUTCOME:

An ideal progression route from the Level 3 Design & Draughtsperson Apprenticeship.

### ***The skills the apprentice will develop:***

- Assessment and presentation of client requirements
- Implement the most appropriate solutions for construction projects
- Develop detailed designs
- Prepare and present design proposals and solutions to meet client requirements
- Control document production and co-ordinate design information
- Inspect and report on quality standards
- Assist in commissioning of finished construction projects
- Understand financial and legal constraints and the importance of cost control

### ***The knowledge the apprentice will gain in:***

- Construction Practice and Management
- Construction technology
- Legal & statutory Responsibilities in Construction
- Identify, define, plan, develop and execute a successful project
- Measurement & Estimating
- Understand factors that affect design

## QUALIFICATION AND TRAINING

- 2 ½ Year Apprenticeship programme
- CDBT Skills, Knowledge & Behaviours – *assessed in the workplace*
- Level 4 HNC Construction and the Built Environment – *Day release in Barnsley*
- End Point Assessment – Project, Interview & Online Test

# BUILDING SERVICES ENGINEERING TECHNICIAN - HIGHER APPRENTICESHIP LEVEL 4

## SUITABLE FOR:

Assistant Project Engineer, Assistant Engineer or Building Services Site Technician, Assistant Project Managers, Project Managers and Site Managers.

## LEARNING OUTCOME:

The Level 4 Building Services Engineering Technician Standard is designed to create highly skilled employees who can contribute to the success of complex construction projects by demonstrating skills, knowledge and behaviours in key aspects of the installation of building services equipment, such as mechanical and electrical services and the co-ordination of site activities as well as contributing to wider project objectives.

Building Services Engineering Technicians will be working on construction sites and as well as being able to deliver their own technical responsibilities they will also need to supervise and co-ordinate a workforce involved in the delivery of trades activities and ensure their safety and the safety of others. There will also be some liaison with third parties such as design teams, clients and statutory authorities.

### ***The Skills & Knowledge the apprentice will develop:***

- Health & Safety
- Sustainability
- Engineering Principles
- Project Management
- Planning and Organising Work
- Monitoring Quality

## QUALIFICATION AND TRAINING

- 2 ½ Year Apprenticeship programme
- BSET Skills, Knowledge & Behaviours – *assessed in the workplace*
- Level 4 HNC in Construction and the Built Environment – *Day release in Barnsley*
- End Point Assessment – Project, Interview & Online Test

# CONSTRUCTION SITE ENGINEERING TECHNICIAN - HIGHER APPRENTICESHIP LEVEL 4

## SUITABLE FOR:

Assistant Site Engineer, Assistant Engineer or Civil Engineering Technician or Construction Site Technician, Project Engineer and Project/Site Managers. (Must be office and site based)

## LEARNING OUTCOME:

The Level 4 Construction Site Engineering Technician Standard is designed to create highly skilled employees who can contribute to the success of complex construction projects by demonstrating skills, knowledge and behaviours in key aspects of construction engineering and the co-ordination of site activities as well as contributing to wider project objectives.

Site Engineering Technicians will be working on construction sites and as well as being able to deliver their own technical responsibilities they will also need to supervise and co-ordinate a workforce involved in the delivery of trades activities and ensure their safety and the safety of others. There will also be some liaison with third parties such as design teams, clients and statutory authorities.

### ***The Skills & Knowledge the apprentice will develop:***

- Health & Safety
- Sustainability
- Engineering Principles
- Construction Management
- Planning and Organising Work
- Monitoring Quality

## QUALIFICATION AND TRAINING

- 2 ½ Year Apprenticeship programme
- CSET Skills, Knowledge & Behaviours – *assessed in the workplace*
- Level 4 HNC in Construction and the Built Environment
- End Point Assessment – Presentation, Structured Interview & a Written Report

# STEEL FIXER APPRENTICESHIP STANDARD LEVEL 2

## SUITABLE FOR:

Construction Steel Fixer, Steel Fitter & Construction Site Supervisor

## LEARNING OUTCOME:

The steel fixer will typically be working as part of larger team on a construction project in which they will have responsibility for positioning, assembling and fixing of different shapes and sizes of steel rebar to the correct specification and tolerances. The steel fixer will be able to interpret contract information, drawings and specifications in order to assemble and install the components correctly.

### ***The Skills & Knowledge the apprentice will develop:***

- Health & Safety
- Read, interpret and comply with information from BIM Models, drawings and specifications.
- Shape and assemble different types of reinforcing bars including coupling and fixing.
- The methods of installing prefabricated and manufactured elements.
- How to install reinforcing steel in-situ.
- Offsite construction, transportation, storage and assembly.

## QUALIFICATION AND TRAINING

- 15 month Apprenticeship Programme
- Steel Fixing Skills, Knowledge & Behaviours – *assessed in the workplace*
- Specialist Training programme delivered by industry experts on a live site (see below)
  - Health & Safety
  - Cut, bend and connect reinforcing steel
  - Prefabrication of reinforcement elements
  - Shape and Assemble Structures
  - RC Detailing and the principles of RC Detailing
  - Interpret drawings and specifications
  - Use digital tools / BIM Models to aid steel fixing
  - Lifting and positioning of pre-assembled reinforcement elements

# ASSESSOR/COACH APPRENTICESHIP STANDARD LEVEL 4

## SUITABLE FOR:

Experienced professionals that have specialised in a profession in a sector of choice, they may, for example, coach, assess and support apprentices, trainees, or new recruits (ranging from young entrants to new CEOs) in the workplace, commensurate with their own level of experience and qualifications, as required by their employer or their sector.

## LEARNING OUTCOME:

You will be developed to coach and assess vocational learners, usually on a one-to-one basis, in a range of learning environments. Coaching skills involve complex communication techniques to actively listen, provide feedback and to engage learners in planning their individualised learning programme.

You will learn:

- How to inspire and motivate learners
- Equality and diversity
- Development planning
- Recording data within General Data Protection Regulation (GDPR)
- Safeguarding

The apprentice will operate at level 2 for English, Maths and ICT in order to support the learners with essential functional skills. Constructive feedback will be key to enable learners to progress as planned at the beginning of the course, safeguarding vulnerable learners much be to at least a level 1 and all quality aspects of awarding organisational requirements must be met.

## QUALIFICATION AND TRAINING

- 15 months Programme
- Level 3 Standard in coaching and assessing delivered in the workplace or remotely
- Safeguarding Level 1
- Math, English & ICT at Level 2
- End Point Assessment – Observation & Professional Discussion



# BUSINESS ADMINISTRATION APPRENTICESHIP STANDARD LEVEL 3

## SUITABLE FOR:

Business administrators have a highly transferable set of knowledge, skills and behaviours that can be applied in all sectors. This includes small and large businesses alike; from the public sector, private sector and charitable sector. The role may involve working independently or as part of a team and will involve developing, implementing, maintaining and improving administrative services.

## LEARNING OUTCOME:

Business administrators develop key skills and behaviours to support their own progression towards management responsibilities. The responsibilities of the role are to support and engage with different parts of the organisation and interact with internal or external customers. With a focus on adding value, the role of business administrator contributes to the efficiency of an organisation, through support of functional areas, working across teams and resolving issues as requested. The flexibility and responsiveness required allows the apprentice to develop a wide range of skills.

You will learn:

- IT
- Record & document production
- Decision Making
- Interpersonal Skills & Communication
- Planning & organisation
- Project Management

## QUALIFICATION AND TRAINING

- 18 month Programme
- Administration Skills, Knowledge & Behaviours – *assessed in the workplace*
- Math & English at Level 2
- End Point Assessment – Knowledge Test, Portfolio based interview & Presentation

# CUSTOMER SERVICE PRACTITIONER APPRENTICESHIP STANDARD LEVEL 2

## SUITABLE FOR:

The role of a Customer Service Practitioner is to deliver high quality products and services to the customers of their organisation. Your core responsibility will be to provide a high quality service to customers which will be delivered from the work place, digitally or through going out into the customers own locality.

You provide service in line with the organisation's customer service standards and strategy and within appropriate regulatory requirements. Your customer interactions may cover a wide range of situations and can include; face-to-face, telephone, post, email, text and social media.

## LEARNING OUTCOME:

Your actions will influence the customer service experience and their satisfaction with your organisation. You will demonstrate excellent customer service skills and behaviours as well as product and/or service knowledge when delivering to your customers.

You will learn:

- Interpersonal Skills & Communication
- Personal Organisation
- Influencing skills
- Dealing with customer conflict and challenges
- Product & Service knowledge
- Customer Experience
- Systems & resources

## QUALIFICATION AND TRAINING

- 14 months Programme
- Customer Services Skills, Knowledge & Behaviours – *assessed in the workplace*
- Math & English at Level 2
- End Point Assessment – Presentation, observation & Professional Discussion

# CUSTOMER SERVICE SPECIALIST APPRENTICESHIP STANDARD LEVEL 3

## SUITABLE FOR:

The main purpose of a customer service specialist is to be a 'professional' for direct customer support within all sectors and organisation types. You are an advocate of Customer Service who acts as a referral point for dealing with more complex or technical customer requests, complaints, and queries.

## LEARNING OUTCOME:

Your actions will influence the customer service experience and their satisfaction with your organisation. You will demonstrate excellent customer service skills and behaviours as well as product and/or service knowledge when delivering to your customers.

You will learn:

- Business focused service delivery
- Customer journey knowledge
- Knowing your customer needs
- Customer service culture
- Dealing with customer conflict and challenges
- Product & service knowledge
- Positive customer experience

## QUALIFICATION AND TRAINING

- 18 months Programme
- Customer Services Skills, Knowledge & Behaviours – *assessed in the workplace*
- Math & English at Level 2
- End Point Assessment – Practical Observation with Q&A, Work based project & Professional Discussion

# TEAM LEADER APPRENTICESHIP STANDARD

## LEVEL 3

### SUITABLE FOR:

A Team leader or supervisor is a first line management role, with operational and project responsibilities or responsibility for managing a team to deliver a clearly defined outcome. They provide direction, instructions and guidance to ensure the achievement of set goals.

Working in the private, public or third sector and in all sizes of organisation, specific responsibilities will vary, but the knowledge, skills and behaviours needed will be the same whatever the role.

### LEARNING OUTCOME:

Key responsibilities are likely to include supporting, managing and developing team members, managing projects, planning and monitoring workloads and resources, delivering operational plans, resolving problems, and building relationships internally and externally.

You will learn:

- Leading & Managing People
- Building Relationships & Communication
- Operational Management
- Project Management
- Finance
- Decision Making

### QUALIFICATION AND TRAINING

- 18 months Programme
- Team Leader Skills, Knowledge & Behaviours – *assessed in the workplace*
- Math & English at Level 2
- End Point Assessment – Presentation & Professional Discussion

# OPERATIONS & DEPARTMENTAL MANAGER APPRENTICESHIP STANDARD LEVEL 5

## SUITABLE FOR:

An Operations or departmental manager is someone who manages teams and/or projects, and achieving operational or departmental goals and objectives, as part of the delivery of the organisations strategy. They are accountable to a more senior manager or business owner.

Working in the private, public or third sector and in all sizes of organisation, specific responsibilities and job titles will vary, but the knowledge, skills and behaviours needed will be the same.

## LEARNING OUTCOME:

Key responsibilities may include creating and delivering operational plans, managing projects, leading and managing teams, managing change, financial and resource management, talent management, coaching and mentoring. Roles may include: Operations manager, Regional manager, Divisional manager, Department manager and Specialist managers.

You will learn:

- Operational Management
- Project Management
- Leading & Managing People
- Building Relationships
- Communication
- Finance
- Decision Making

## QUALIFICATION AND TRAINING

- 30-36 months Programme
- Team Leader Skills, Knowledge & Behaviours – *assessed in the workplace*
- Math & English at Level 2
- End Point Assessment – Portfolio of Evidence, Professional Discussion & Project, Presentation & Questioning

## SHORT COURSES - AUTOCAD

### COURSE AIMS

This course is aimed at new users of AutoCAD or AutoCAD LT. It is taught at beginner's level therefore no previous knowledge of AutoCAD is required. However, attendees should possess basic PC knowledge. Prior knowledge of draughting would be an advantage but not essential. Course content can be tailored to the needs and level of each group or organisation.

### COURSE OUTLINE

- Launch and Configure AutoCAD
- Navigate AutoCAD
- Understand the Ribbon Interface, Shortcut Keys and Function Keys
- Object Snaps and Object Tracking
- Basic Drawing Creation – Lines, Arcs, Shapes, Details, Hatching
- Basic object editing
- Object Annotation – Text and Dimensions
- 1<sup>st</sup> and 3<sup>rd</sup> Angle Projection
- Basic Drawing Production Including Plans, Elevations and Sections
- Introduction to 3D CAD

### COST AND DURATION

- Cost: £700
- Location: Barnsley or on site (depending on numbers)
- Time: 3 Days Delivery 9.00am – 4.30pm

## SHORT COURSES – RC DETAILING

### COURSE AIMS

To be able to read reinforcement and design intent against Standards such as the Standard Method of Detailing Structural Concrete.

Determine the most suitable method of detailing to given constraints such as site restrictions and construction programme and produce reinforcement details and bar bending schedules to align to these constraints. Basic CAD experience is required.

### COURSE OUTLINE

- What is Reinforced Concrete
- Basic Design Principles
- Documentation and Principles – Standard Method of Detailing Structural Concrete, BS 8666:2005 & EC2
- The role of a detailer: Drawing production/Bar Bending Schedule production
- Detailing Principles – Construction Sequence, Buildability, Laps, Anchorage, Cover etc
- Detailing Exercises such as:
  - Pile Caps
  - Ground Beams
  - Columns
  - Walls
  - Flat Slabs
- Proprietary Systems – couplers, kwikastrip, shear rail etc

### COST AND DURATION

- Cost: £700
- Location: Barnsley or on site (depending on numbers)
- Time: 3 Days Delivery 9.00am – 4.30pm

## SHORT COURSES – REVIT (STRUCTURES)

### COURSE AIMS

To gain an understanding about BIM (Building Information Modelling) and the associated standards and publications.

To be able to operate Revit and produce structural drawings, details and schedules from modelled components which include foundations, floor plans, walls, columns, beams etc. You will also be able to modify components, materials etc to suit specific design requirements.

By the end of the course the attendees will be able to insert CAD, Revit & IFC files into Revit and also export robust IFC's to enable interface with other software.

### COURSE OUTLINE

- What is BIM and the associated standards
- Launch Revit and start a new project
- Understand shortcut keys and ribbons
- Inserting and modifying components such as foundations, columns, beams, walls, slabs
- Creating plans, sections, views and callouts
- Creating drawings
- Adding dimensions and text to drawings and details
- Creating schedules for components within the model
- Naming conventions in line with BS 1192

### COST AND DURATION

- Cost: £700
- Location: Barnsley or on site (depending on numbers)
- Time: 3 Days Delivery 9.00am – 4.30pm



SPECIALIST TRAINING

2021 Specialist Block Training Programme

Block	Wk No	Course Dates	Subject Area
BLOCK1 2D and 3D AutoCAD	1	19 <sup>th</sup> April - 23 <sup>rd</sup> April 27 <sup>th</sup> Sept – 1 <sup>st</sup> Oct	Introduction to Design and Draughting & AutoCAD Configuring AutoCAD - hardware and software Learn basic AutoCAD commands - drawing/modifying Create line type, layers, hatching, blocks Create templates, dimension styles, text styles, title blocks Introduce industry standard exercises – buildings, building components
	2	26 <sup>th</sup> April – 30 <sup>th</sup> April 4 <sup>th</sup> – 8 <sup>th</sup> October	Pseudo 3D i.e. Isometric, Oblique, Axonometric Introduce 3D AutoCAD techniques Create 2D reinforced stair. Create a 3D version Viewports and paper space manipulation Create a paper space drawing showing 2D, 3D and title block Issue major house drawing project - 2D CAD
BLOCK2 Structural Drawings, Sections, Elevations	3	4 <sup>th</sup> – 7 <sup>th</sup> May 11 <sup>th</sup> – 15 <sup>th</sup> October	Section and elevation drawing and detailing Complex AutoCAD 2D & 3D drawings Creating, modifying and inserting blocks Handling embedded/linked objects in AutoCAD Handling raster objects in AutoCAD Handling XREF's in AutoCAD
	4	10 <sup>th</sup> – 14 <sup>th</sup> May 18 <sup>th</sup> – 22 <sup>nd</sup> October	Drawing and detailing structural steelwork and concrete Slabs, Beams, Columns, Foundations, Staircases, Types of Steel Connections
BLOCK3 BIM – Revit	5	7 <sup>th</sup> – 11 <sup>th</sup> June 1 <sup>st</sup> – 5 <sup>th</sup> November	Introduction to BIM BIM Stages, COBie, BIM RIBA, PAS1192, BIM Protocol Roles and responsibilities Common data environment  Introduction to Revit Create an example 3D dwelling in class Issue written specification for a dwelling - group work
	6	14 <sup>th</sup> – 18 <sup>th</sup> June 8 <sup>th</sup> – 12 <sup>th</sup> November	Structural Revit models Use of CAD drawing as backcloth Creating structural elements i.e. slabs, foundations, floors, columns, beams etc Issue written specification for multi storey Revit model Issue written specification for student dwelling exercise
BLOCK4 RC Detailing	7	17 <sup>th</sup> – 21 <sup>st</sup> May 15 <sup>th</sup> – 19 <sup>th</sup> November	Introduction to RC Detailing Basic Design Principles Documentation (BS8666, EC2, Standard Method of Detailing) Detailing Principles – construction sequence, buildability, laps, anchorage, cover Drawing & Schedule Production
BLOCK5 TEKLA	8	21 <sup>st</sup> – 25 <sup>th</sup> June 22 <sup>nd</sup> - 26 <sup>th</sup> November	Introduction to TEKLA, Concept, screen layout, navigation, configuration Basic commands Use TEKLA to create industry standard steelwork and reinforcement drawings
BLOCK6 Surveying for Construction	9	28 <sup>th</sup> June – 2 <sup>nd</sup> July 29 <sup>th</sup> Nov – 3 <sup>rd</sup> December	Measured surveys - Method, Equipment, People, Survey Arrangements, Safe Working Practices, Circumstances & Conditions, Survey Information, Presentation of information Levelling surveys to produce drawings
	10	5 <sup>th</sup> – 9 <sup>th</sup> July 6 <sup>th</sup> – 10 <sup>th</sup> December	Linear Surveys to produce drawings Measure angles and produce results from calculations Perform setting out of small buildings

## ONLINE LEARNING COURSES

### COURSES

- AutoCAD Essentials
- AutoCAD Intermediate
- AutoCAD Advanced/3D
- AutoCAD – Civil 3D
- Revit for Architecture
- Revit for Building Services
- Revit for Landscape Architecture
- Revit for Structure
- Advanced Revit
- 3DS Max
- BIM Project Certification Training
- Introduction to Building Information Modelling (BIM)
- Navisworks Manage

For course content on each of the above course please see the separate Virtual Learning Brochure.

### COST AND DURATION

- Cost: £500
- Location: Online
- Time: 3 Days Guided Learning Hours
- Certification on completion of all module assessments

## TRAINEESHIPS

We are looking for employers from the Architectural, Engineering & Construction sectors to support our traineeship programme.

If you have been considering recruiting an apprentice this may be an ideal chance for you to find the right candidate.

**WE HAVE CREATED A VIRTUAL WORK EXPERIENCE PROGRAMME FOR EMPLOYERS TO USE AS A GUIDE TO MAKE WORK PLACEMENTS LESS OF A BURDEN AND EASILY DELIVERABLE TO GIVE YOUNG PEOPLE THE CHANCE THEY NEED IN GAINING EMPLOYMENT IN OUR INDUSTRY.**

### **Employer Incentives to get involved**

- £1000 government incentive to provide 70 hours experience
- Opportunity to trial and select high calibre potential new apprentices/employees
- Meeting social responsibilities by supporting young people locally to gain work experience

*Can you offer a proactive and motivated trainee a work experience opportunity either working in the office, on site or remotely? Please register your interest and we can discuss your requirements further.*