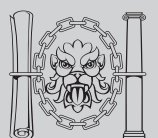




aspiration magazine

Issue 19
Autumn/Winter 2024



Practice information, education and guidance

Is running your own Practice a career aspiration? Is it your goal to run your own business as a Chartered Architectural Technologist or in partnership or co-directorship with others?

To give you a flavour, we have produced some information on what it requires, what CIAT provides you as a practising Architectural Technology professional, and how you would establish your own CIAT Chartered Practice.

Please visit architecturaltechnology.com, log in to the My CIAT area and select *Practice information, education and guidance*.



A word from the Editor

Welcome to another issue of *aspiration magazine!* This autumn/winter edition delves deep into the ever evolving landscape of **Architectural Technology**, as we showcase stories of **innovation**, **sustainability**, and the power of **collaboration**.

We spotlight the fantastic achievements celebrated at this year's **AT Awards** from students, graduates and early-career professionals. The accomplishments of the projects and reports on display underscore the pivotal role of **Architectural Technologists** in shaping a more sustainable future.

This issue also recognises the journey of aspiring AT professionals. From immersive learning experiences in **Glasgow and Dubai** to inspiring

personal stories of growth at university and in the workplace, each story reflects a shared commitment to progress. Furthermore, we examine the transformative potential of the **Passive House Standard**, urging AT professionals to embrace sustainability as both a responsibility and an opportunity.

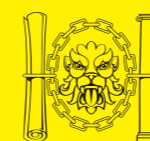
Whether you're a student charting your career path, a seasoned practitioner pushing boundaries, or an enthusiast curious about the **built environment**, we hope these stories ignite your passion for Architectural Technology.

Happy reading!

Warm regards
April McKay
Editor

Get in touch if you have any feedback, ideas or content for the next issue.

Email a.mckay@ciat.global



In this issue...

06
aspiration

07
AT Awards 2024 | Winners

16
From classroom to construction:
My AT journey

18
Eye-opening insights on industry
in Dubai

20
Adopting the Passive House
Standard: A unique opportunity
for Architectural Technologists



22
Mentoring: A key to unlocking
training success

23
Everything you need to know
before signing an employment
contract

26
Hands on learning in Glasgow
city

28
Designing my future:
Architectural Technology &
university life

30
Embracing new beginnings

32
Shaping the future: Technical
demonstrations at Cardiff
Metropolitan University



CIAT aspiration

Nuture. Network. Develop.

You might often picture what your career as an Architectural Technology professional or Chartered Architectural Technologist will look like, but find it harder to picture how it will start.

It is never too early to start networking and being affiliated and engaged with organisations as this may be fruitful later in your career; either because you know who to contact or perhaps to find your next role. This is why CIAT is committed to helping your career in AT get started through our aspiration community.

What is aspiration?

aspiration is an inclusive global community of members and affiliates, made up of students, graduates, Associates, affiliates and recently qualified Chartered Architectural Technologists. aspiration supports aspiring professionals and helps to shape the future of the profession.

When you join CIAT, you are automatically a member of aspiration. You can become more involved at a Regional/Centre level with the local aspiration Chair who heads the local aspiration Group.

aspiration is led by Joe Hyett MCIAT, a Chartered Architectural Technologist based in the Wessex Region.

What does it do?

One of aspiration's main aims is to assist students, graduates and newly qualified members into the profession. They host events such as site visits, practice interviews, networking events and social gatherings. aspiration offers so much more than just events however – aspiration Groups engage regularly with schools and universities through presentations and careers fairs, helping to encourage the young professionals of tomorrow into the sector.

aspiration collaborates with other groups within the built environment, including Novus (CIOB), Matrics (RICS), YEN



(CIBSE) and FAN (RIBA). The aspiration Chairs also work with their local CIAT Approved/Accredited programmes as well as Regional/Centre Committees.

Why get involved?

With the aspiration network located all over the country, the opportunities are vast; choose to attend an event, deliver a presentation or sit on an aspiration Group. Your level of involvement is up to you. There is something for everyone in aspiration. You may simply want to come along and meet some of your fellow Architectural Technology colleagues, maybe attend one or two CPD seminars, network at an event or seek some support through your local Chair.

How do I get involved?

It is very easy to get involved and there are many ways of doing so. If you know a Regional/Centre Committee member, Programme Leader or aspiration member, find out about when the next event, CPD or meeting is taking place, and introduce yourself.

Email aspiration@ciat.global to be introduced to your local aspiration Group.

Get in touch and become involved with aspiration and CIAT! ■



Winner
2024

STUDENT AWARD FOR EXCELLENCE
IN ARCHITECTURAL TECHNOLOGY
| PROJECT



Cranwood Residence

Words by Harriet Paige Key ACIAT, Anglia Ruskin University

Nestled within the heart of Muswell Hill, Cranwood Residence represents a bold and forward thinking vision for sustainable urban living. This innovative, zero carbon, multigenerational development seeks to transform a key area of Haringey, creating a vibrant and inclusive community that effortlessly blends residential, social and environmental spaces.

The development features 28 thoughtfully designed apartments, catering to diverse living arrangements and tenure preferences. With a mix of adaptable living spaces, the project prioritises inclusivity and comfort for residents of all ages and family structures. Sustainability is wove into every aspect of the design, from building

technologies to construction methodology and the selection of environmentally friendly materials, minimising both embodied and operational carbon emissions. This not only reduces the project's overall carbon footprint but also sets the stage for a greener future.

As part of a broader masterplan, Cranwood Residence envisions the redevelopment of adjacent council homes, adding a new residential storey and introducing community-focused amenities such as a coffee shop and nursery. These additions are designed to support families, creating a seamless link from nursery to the adjacent St James Primary School. This well considered, family-oriented approach enhances the development's role as a community hub, enriching the lives of residents while integrating with the wider Muswell Hill neighbourhood.

Cranwood Residence goes beyond simply providing living spaces. It integrates a range of communal amenities to foster community cohesion among its residents. A ground floor community room and a landscaped rooftop terrace, complete with a greenhouse, serve as gathering spaces for social interaction and relaxation. These shared spaces, alongside landscaped public areas featuring raised garden beds and a biodiversity enhancing swale,

invite both residents and the local community to connect with nature. The incorporation of these green areas enhances the development's environmental impact, improving air quality and promoting healthier living.

At the heart of the development is a deep commitment to sustainability. The project embraces renewable approaches to water and energy management, taking advantage of the developments 42,000L swale to irrigate the landscaped areas and rooftop garden, recycling greywater and rainwater. While green energy is generated through traditional photovoltaic panels to the flat sedum roof and Building Integrated Photovoltaic (BIPV) technology to the building fabric. The combination of which could generate enough to meet the energy needs of the development, while supplying excess power back to the grid. These practical solutions optimise the use of available resources, contributing to the development's environmental sustainability.

Cranwood Residence is designed with longevity and performance in mind. Cross Laminated Timber (CLT) is used extensively throughout the project, selected for its durability, thermal and fire-resistant properties, as well as its ability to sequester carbon. Paired with materials such as mineral wool insulation to provide superior fire resistance and thermal efficiency. By adopting Passive House principles, the development exceeds Building Regulations for insulation and airtightness, ensuring optimal energy performance and comfort for its residents. The Mechanical Ventilation Heat Recovery (MVHR) system, paired with an Exhaust Air Heat Pump (EAHP), captures and enhances waste heat from everyday activities, reducing energy consumption and contributing to the development's green credentials. Fresh air will be drawn in through 'chimneys' equipped with wind catchers, directing airflow through the pipework and distributing it to each apartments ventilation system. Exhaust air outlets are discreetly connected to air bricks integrated into the external wall, minimising visual impact on the façade.

Safety and buildability are key considerations, with prefabricated CLT panels and bespoke steel elements streamlining the construction process. Health and safety measures are integral to the design, with fire safety, fall prevention and compartmentalised spaces all a focal point to ensure the safety of residents. Retractable bollards and controlled vehicle access further enhance pedestrian safety within the development allowing access for emergency vehicles and preventing access to outside traffic.

While functionality and sustainability are central to Cranwood Residence, its aesthetic relationship with the environment has been equally considered. The building's massing and scale are thoughtfully designed to complement the natural landscape. The strategic use of volumetric design, with setbacks and stepped forms, breaks down the overall mass of the structure, allowing it to align with the site's natural topography. Winding pathways and carefully landscaped areas mirror the organic patterns of nearby Highgate Wood and Parkland Walk, ensuring a harmonious integration with the natural surroundings.

In effort to pay homage to the local Edwardian architecture, recycled red brick is adopted at ground level, maintaining the area's historical context. This traditional brick base transitions to brick slip panels on the upper floors, minimising raw material usage, weight and embodied carbon, while preserving visual continuity. These brick elements also feature projecting brickwork that add texture and craftsmanship to the façade.

Contemporary materials like zinc cladding, timber canopies and brise soleil introduce a modern edge, balancing traditional with contemporary. The cantilevered CLT balconies provide functional outdoor spaces while contributing to the rhythm of the building's façade, creating depth and visual interest. Combined with sustainable features such as green roofs, these design elements allow Cranwood Residence to blend seamlessly into both its urban and natural contexts, while making a bold architectural statement.

In summary, Cranwood Residence is more than just a place to live, it is a vibrant, forward-thinking community that fosters wellbeing and connection, both within its walls and broader Muswell Hill neighbourhood.

Judges' comments

Harriet's project exemplifies technical excellence and sustainable innovation in architectural design. She impressed with her concise yet comprehensive approach to her project with the rich mix of styles that really set this submission apart and captured the attention of all Judges.

The display boards demonstrate the wide range of skills Harriet possesses, showing an advanced understanding of the design process and a number of important agenda for the practicing Architectural Technologist. The work stands out for its clarity and richness of information. Providing multiple views of the design and including solar shade studies sets a benchmark for Award submissions.

She demonstrates a deep understanding of Building Regulations, integrating them seamlessly into an aesthetically pleasing design. Her thorough use of rainwater harvesting and PV integrated roof tiles sees Cranwood Residence exceeding Approved Documents to make the scheme a highly efficient and sustainable project.

Harriet has a great eye for detailing. This technically well resolved design solution presents a comprehensive range of key interface details. The Judges agreed she had been brave in her choice to display some of the more complex junctions, producing them to a very high standard and showcasing her simple yet effective strategies for Passivhaus and biodiversity.

This is truly robust project, presented with a professional layout and excellent use of technical details, annotation diagrams and 3D visualisations. This project stands out for its clarity, depth and thoughtful execution, making it a deserving winner. ■

Winners & Finalists

STUDENT AWARD FOR EXCELLENCE IN ARCHITECTURAL TECHNOLOGY | PROJECT

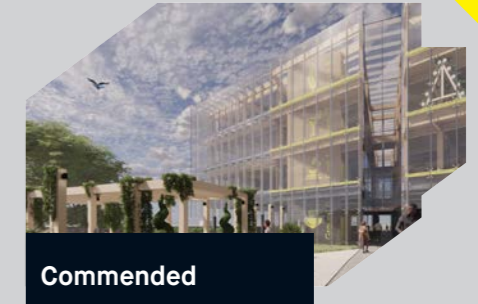


Highly Commended

The Octagon

Rebecca Wakely ACIAT,
Anglia Ruskin University

The Octagon aims to provide a centralised, accessible space for creative expression and community engagement in Cambridgeshire, while promoting economic growth and preserving local heritage. The project combines sustainable features with affordability and futureproofing in mind, in order to create an inspiring outdoor venue that will inspire an evening economy.



Commended

Whitefriars Rehabilitation Centre

Anthony Richardson ACIAT,
Coventry University

The Centre is dedicated to helping people with neurological conditions establish their new normal and to get on with their lives through dedicated residential and day rehabilitation services. The building design is intended to provide maximum use of the space available on the proposed site. It utilises modern methods of construction and sustainable methods of design and construction that meet the latest Building Regulations.



Finalist

Colwick EcoLearning Haven

Van Son Tung Dinh,
Nottingham Trent University

This is a multi-functional facility that includes an exhibition area, working and learning spaces, a café and a restaurant. The park, with its rich natural landscape and diverse flora and fauna, offers an ideal setting for this development. The design emphasises inclusivity and accessibility while integrating sustainable building practices to meet zero-carbon goals. The concept blends education, recreation and sustainability, harmoniously integrating with the natural landscape of Colwick Country Park.



Finalist

The Merchants

Elia Orme,
University of Derby

The Merchants project aims to regenerate the existing North Riverside brownfield site currently occupied by offices and car parking facilities. The entire building, including commercial facilities, is to be constructed to exceed Passivhaus requirements, with a highly efficient thermal envelope and low u-values reducing the requirement for artificial measures for heating and cooling. This will provide a small-scale district heating network that is primarily self-sufficient.



Finalist

Sheffield City Arena

Luke Wells,
Sheffield Hallam University

The University launched the Sheffield City Arena Project with the goal of enhancing the city's ability to host large-scale entertainment, sports, and conference events, positioning Sheffield as a vibrant hub for both national and international events. The venue was designed with functionality and inclusivity at its core, featuring a 3,500-capacity auditorium, 2,000 square meters of exhibition space, breakout spaces, food and drink outlets, and an exterior design that would create a landmark building within the city.

Winner
2024STUDENT AWARD FOR EXCELLENCE
IN ARCHITECTURAL TECHNOLOGY
| REPORT

A Design Decision Support Tool to Visualise Embodied Carbon at Early Design Stage

Words by Killian Collins ACIAT, Technological University Dublin

Designers play a crucial role in promoting sustainable design. Automating the calculations of embodied carbon and visualising the impact of materials can encourage better design decisions.

As designers increasingly recognise the crucial role of the built environment in combating climate change, the use of Building Information Modelling (BIM) technology can become pivotal. BIM offers a transformative approach to design and construction processes through digital models and now data visualisation. With the urgency of addressing embodied carbon emissions in construction, this research aims to develop an automated BIM workflow that enables designers to visualise and mitigate the environmental impact of material selection within domestic construction projects in Ireland and the UK, aligning with national targets for emissions reduction by 2030. Using comprehensive data mapping and digital visualisation tools, problematic areas in material selection are identified, allowing for informed material substitutions that can significantly reduce the building's carbon footprint. The author has developed a tool and process that technical building designers can use to identify selected materials and the validated embodied carbon values of these materials.

Streamlining BIM workflows for embodied carbon assessment within digital construction designs is crucial in any BIM mandate. In January 2024, BIM requirements in Ireland will be part of the scope of works for consultants hired to plan and manage the construction of public works contracts worth more than €100 million and over a four-year period cascade down to projects under €1 million. It is noted that the UK construction industry is four years ahead of its counterpart in Ireland. Greenhouse gas emissions in Ireland have increased by 9.2% from 1900 to 2022 with a 2 million tons of carbon dioxide equivalent (CO₂e) increase in the last four years. To address this concern, stringent low U-value targets have been implemented, aiming to discourage the

utilisation of fossil fuels. With the increasing construction of new dwellings, there's an emphasis on achieving the mandated U-value standards. However, this emphasis on meeting U-values has resulted in the overshadowing of considerations regarding embodied carbon.

This study investigated the potential of an automated BIM workflow that enables designers to visualise and mitigate the environmental impact of material selection within domestic construction projects in Ireland. The research aimed to create a BIM workflow that automates embodied carbon calculations throughout the modelling phase, embedding data from Environmental Product Declarations (EPD) into materials within Revit and visualising the impact using the created interactive dashboard. The research suggests that visualising the materials within a project benefits decision making when identifying the problematic area. The promotion of holistic approaches is necessary with the dynamic nature of new sustainable construction methods.

The study initially carried out an in-depth literature review to identify gaps in existing BIM based methods. To test the created BIM workflow, a case study was chosen. Through comprehensive data mapping and the use of the created interactive visualisation dashboard, problematic areas in material selection were identified, allowing for informed substitutions that significantly reduced the building's carbon footprint, illustrating the potential of such methodologies in achieving sustainable construction goals. It is evident from the existing literature that steps towards BIM integration of LCA and GWP visualisation are required to support the decarbonisation of the built environment. The process for conducting this case study

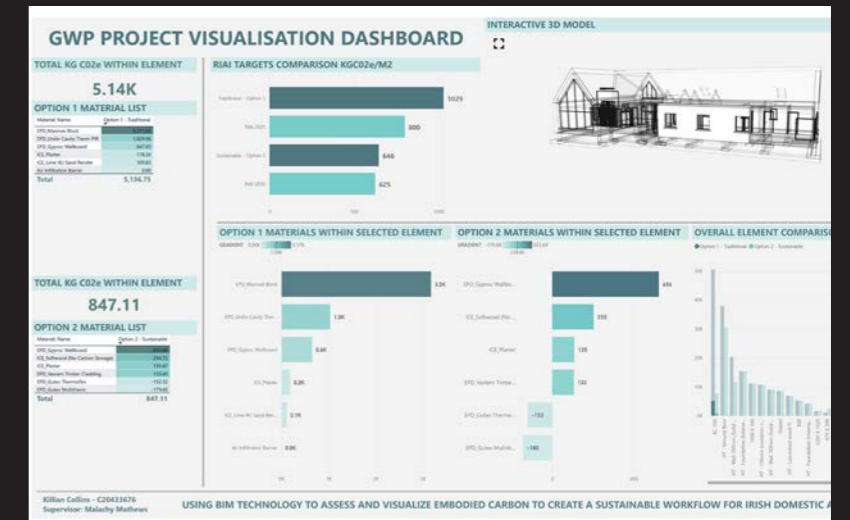
research will be structured into key stages as outlined below:

1. Identify benchmarks and prepare validated and unvalidated data sources to be used in study.
2. Create a digital material library for Revit and map GWP data to materials through the development of a visual programming script.
3. Model case study digital building for experimentation of the study.
4. Create an interactive dashboard to visualise the whole-life global warming potential of materials within the project.

Various methods were explored to integrate GWP data into materials within Revit. The first step to creating a material library was identifying where the data was being inputted; this was achieved by creating a suite of shared parameters housed in the materials. After analysing the existing methods, a single dataset was chosen: a manually inputted Excel dataset where the author inputs both ICE and EPD/DoPC data structured in the template. It allows for materials to be created and mapped with GWP data instantly, once instead of multiple times per EPD/DoPC, as demonstrated by Dempsey & Mathews (2023), the material name is identified by the user, and density and all stages of GWP are inputted. A dynamo script was built to input materials into the dataset while mapping materials to the shared parameters housed within the material parameters. When the script is played, the materials outlined in the dataset are created with their associated GWP values. The digital model is then built using the imported materials, the materials automatically populating a pre-built material take-off schedule. This then allows for automatic calculations of GWP of the building. The schedule is subsequently employed to compute a cumulative total.

As projects progress, the schedule will update automatically. In the preliminary stages of a design where specific materials are not known, the ICE database materials are generic and not manufacturer products. It should be noted that this can cause inaccurate calculations with unvalidated data.

As researched, the main problem with calculating the GWP of a design is identifying where the problematic area is. A visualisation dashboard was created in power BI. When the file is loaded, a series of pre-built data visuals in Power BI will automatically populate, including an interactive representation of the BIM model with associated GWP data within the project. The tool has an interactive dashboard which identifies the building's overall kgCO₂e, its comparison per m² to the RIAI 2030 targets, and individual materials kgCO₂e. The tool can create multiple versions for comparison, in effect 'optioneering' the material selection.



To test this workflow further, a focus group was approached. Built environment professionals tested the workflow on real world projects to gauge its practicality and to ultimately find out whether it promoted decision making in material selection.

The analysis of the focus group showed a number of key findings that the workflow played within the built environment. It was shown that 60% of participants made better material decisions due to visualising the impact.

Judges' comments

The Judges were unanimous in agreeing that Killian's report was both an engaging read and addressed a subject that is a real issue for all designers and an important topic for the Architectural Technologist and the broader built environment.

With bang up to date references and a clear method, this study addresses early design embodied carbon in a meaningful way. The Judges were impressed with the clarity of the literature review and the practical approach.

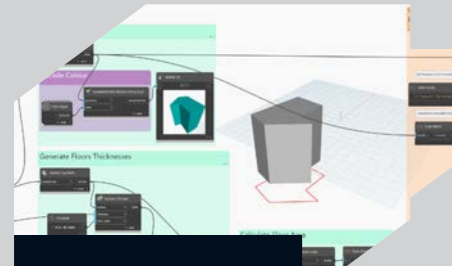
This well considered and executed piece of work was imaginative and highly effective in highlighting the importance of visualisation tools in addressing embodied carbon in the early design stages. With its mix of text, diagrams and graphs combining to make it an effectively written and informative piece of work.

The Judges all commented that the work was innovative in its approach. They also recognised the considerable effort that had gone into the research. They praised the work for its systematic nature and seamless progression, from the introduction, highlighting the importance of the topic, through to the clear analysis and insightful conclusions.

This is an outstanding contribution to the subject. Killian has an excellent writing style; the work was a pleasure to read, and he should be proud of his contribution to the subject and in providing us this exemplar. ■

Winners & Finalists

STUDENT AWARD FOR EXCELLENCE IN ARCHITECTURAL TECHNOLOGY | REPORT



Highly Commended

Investigating Existing Computational Design Methods and Applying Them in an Irish Location's Context

Gabor Villanyi,
South East Technological University

The research begins with an examination of various aspects of CD, including its role in architectural design and comparisons with related methodologies such as Generative Design (GD) and Parametric Design (PD). The study includes a detailed exploration of a customized Dynamo script, which serves as a template for others interested in CD.



Commended

Harnessing Sustainable Urban Drainage Systems (SuDS) for Surface Water Management

Billy Cripps,
Nottingham Trent University

This Report explores the potential of SuDS to minimise surface water runoff on the author's Major Study Project (MSP) site, located near the River Derwent, which faces recurring risks of pluvial flooding. The study evaluates different SuDS configurations using both qualitative and quantitative research methods to determine the most effective solution for managing surface water on the site.

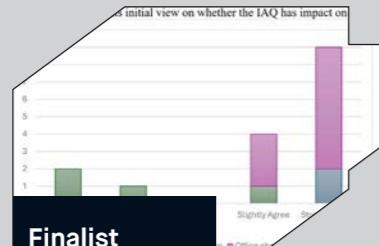


Finalist

Is Artificial Intelligence Shaping the Future of Architectural Modelling?

Amelia Rose Bambra,
Nottingham Trent University

This Report explores the transformative impact of artificial intelligence on architectural modelling, particularly in the context of free-form geometry. The research seeks to evaluate how AI can address the limitations of traditional architectural modelling tools, particularly in the early stages of conceptual design.

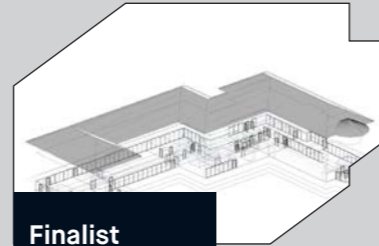


Finalist

The Nexus Between Indoor Air Quality and Productivity

Muhammad Daanyaal,
Birmingham City University

The main focus of this Report was to identify if working in an indoor environment with poor indoor air quality has an impact on a person's productivity in a professional environment. In the methodology, he outlined the fact that a mixed positivist and constructivist epistemological lens was used for this research paper in addition to the using a quantitative approach to gathering primary data in the form of an online questionnaire.



Finalist

How Building Information Modelling (BIM) can be Implemented in Demolition Decision-Making – Case Study on the Shell Laboratory Building

Tehillah Sihlabela
Robert Gordon University

The objective was to explore the Environmental Impact Assessment (EIA) report that was used by Aberdeen Council to validate the demolition of the Tullos former Shell Building. The paper advocates the use of BIM technologies in assessing buildings and obtaining a numerical understanding of the environmental impact of demolition.

Winner 2024

THE ASPIRATION AWARD FOR EMERGING TALENT IN AT



Luke Siddle MCIAT

Words by Joe Davenport MCIAT, Chartered Architectural Technologist



The fourth recipient for excellence and achievement demonstrated by a professional within Architectural Technology, and the coveted title 'Emerging Talent in AT for 2024'.

Luke's enthusiasm, commitment and discipline set him apart from the average Architectural Technologist. As well as the inveterate attention to detail of all dyed-in-the-wool ATs, his faultless professionalism and organisation skills make him a pleasure to work with and means his work is to an exceptional standard and always reliably punctual. Despite being handed significant responsibility for someone of his short career experience, Luke remains composed and continues to excel, pushing others to succeed and improving the standards of those he works with internally and externally. I firmly believe that with his skills, working ethos and his determination to achieve technical excellence.

I've had the pleasure of working with Luke on a variety of projects and had the good fortune of monitoring his development and accomplishments here at P+HS, having worked closely together over the past 3 years.

Prior to Luke joining P+HS Architects, he studied BSC (Hons) Architectural Technology at Leeds Beckett University from 2017-21, with a placement year in industry prior to his final year. Luke contacted us during his final year and had a successful interview shortly after. There were a few things that really stood out to us as a company searching for young talent, first being Lukes's eye for technical detailing. He shared with us some hand drawn, to scale drawings which not only showed his understanding/knowledge of construction but displayed a skill that in recent years has been lost due to the developments in technology. The second quality that he

showed was his leadership skills in group projects, which is a vital attribute for a good technologist. Leading a group project was always going to have transferable skills into working within a design team in practice. The last part of Luke's interview that was noted was his ability to manage and work through the adversity of COVID. He graduated in 2021 with a First-Class Honours degree, which in a time of uncertainty was a brilliant result.

Shortly after graduating, Luke joined P+HS Architects as an Architectural Technologist and it was clear that the same passion and work ethic from his studies transferred immediately into this career. From the off, Luke showed a willingness to learn and wanted exposure to as much of the job role as possible. The first project involvement he had was in the healthcare team as technical support for a new Emergency Department in Scunthorpe. During this period, he helped the team with the production of stage 3, 4 and 5 drawings, schedules, specifications and covered as project lead when team members were out of office. Luke often went above and beyond to ensure the work was completed, reviewed, and amended to the highest quality and never settled for 'good enough', which was brilliant to see. During these early months at P+HS he built strong relationships with colleagues and external consultants through his enthusiasm and commitment.

After Luke's first six months it was clear that he was ready to progress from a technical support role and start

taking on more responsibility. This is something Luke had mentioned during his first PDP (personal development plan) review, and we were more than willing to provide him with these opportunities. In November 2021 Luke was nominated as project lead for a GP surgery extension and refurbishment in Rochdale. This allowed Luke to be more independent and develop his skills in meetings and on-site, regularly liaising with the design team, contractor, client and statutory authorities. During his time working on this scheme, he completed drawings such as 1:5 construction details, internal partition types and external wall types and setting out plans. Another important attribute Luke had to develop was reviewing and commenting on sub-contractor information. He methodically checked drawings and provided vital feedback, ensuring it was in line with his design. I guided Luke in the right direction during this period, but as time passed, I became less involved. Due to him still being very early in his career, we did undertake a lot of reviews and drawing checks, but it was clear that he was taking it in his stride, proving that he was more than capable of stepping up.

When the Rochdale project moved into RIBA stage 5, Luke's availability increased, and we felt it was the right time to give Luke a larger scheme to run as project lead – Scunthorpe Same Day Emergency Care Unit. This was a refurbishment of the old Emergency Department which included a range of acute healthcare services with the constraints of working on an existing building. This new challenge saw Luke having to think on his feet and problem solve in high pressure situations. Not to mention he was still visiting the Rochdale site and dealing with site queries. Due to the nature of refurbishment, Luke faced challenges such as discovering unknown constraints during demolition. For example, the Contractor identified a structural column and shear wall which was unknown during the earlier design stages, Luke resolved this in a professional and calculated manner by providing design options to the team for review and comments. The updated design was signed off by the client shortly after, with no delays to the construction programme. Furthermore, this project required a huge amount of high-level coordination with other consultants, ensuring all clashes were dealt with in the design stages, reducing issues on site. This period was a huge learning curve for Luke and helped shape him into the technologist he is today.

A year into his employment at P+HS, Luke made it clear that becoming a Chartered Member was a huge aspiration for him and set the goal to submit his application within a 12-month period. Needless to say he passed with flying colours and gained extremely positive feedback. It was a proud moment to see Luke walk out of the interview room with a smile on his face: a massively well-deserved moment. Having completed his MCIAT at the age of 24, it was a shining example to the junior members of staff of how you can excel if you push yourself and dedicate extra hours outside of the office.

Moving up the ranks into a more senior role, Luke is now acting as a mentor to one of our junior technologists, Ben. Since taking on the mentor role, Luke has shown clear commitment into helping Ben's development, similar to how Luke started at P+HS. His guidance and encouragement have really helped Ben in the early stages of his career. In

addition to the help during work hours, Luke also offers his time to review and provide feedback on Ben's college work, which is a true reflection of his personality and character. Not only is Luke mentoring junior staff day to day, but he is also relied upon for support when it comes to the MCIAT interview preparation. Luke often sits down with colleagues undertaking the MCIAT interview and guides them based on his recent experiences.

The level of technical ability and eye for detail that Luke showed in his interview has really proved to be a key part of his success and competency. Luke has developed an extremely strong understanding of 1:5 technical detailing and presents his drawings clearly, including all the relevant information required. Over the past year, Luke has served as the technical lead on several projects from RIBA Stage 4 onwards. This stage is typically when we deliver the 1:20 and 1:5 details. Most recently was a modular construction project located in Poole, Bournemouth, which is due to start on site later in the year. This was Luke's first experience working on a modular project, but he quickly adapted and asked all the right questions. Despite limited information from other consultants, Luke took the initiative in Design Team Meetings, frequently requesting the necessary details to ensure everything was meticulously coordinated for his tight Stage 4 deadline. Luke has now established himself as a trusted member of the technical team for advice during the technical stages of a project.

More recently, Luke has been putting his mentoring and technical detailing skills into practice by visiting Leeds Beckett University as an Alumni, helping with the detailing workshops. These sessions have involved Luke sitting down with each student in a 1-1 session, allowing the students to present their work and ask questions. Luke not only provides valuable feedback and advice to the students but acts as a role model figure (it was only 3 years ago that Luke was sitting in their seat). After speaking with Luke's university tutor, she expressed immense gratitude and pride in seeing him return to campus to give back to the university where he studied.

To summarise, we think Luke's accomplishments during the past three years are a huge credit to him, and we're excited to see what the next three years hold. He has gone from strength to strength, starting as a graduate fresh from university, to becoming a Chartered Member of CIAT, a mentor, a project lead with a portfolio of projects and an established member of the technical team. Luke is a shining example of a young technologist with the self-motivation, drive, and talent to succeed. In addition, he has seized opportunities to support his career through additional learning and the MCIAT accreditation. As he continues to expand and share his knowledge, he has become a respected mentor and ambassador for CIAT and P+HS, inspiring the next generation to follow in his footsteps. From an employer's perspective, we are not only impressed with the value that Luke has brought to our team and projects, but in him we see a rarer quality: a young man with an inherent love for the craft of Architectural Technology and a passion for excellence. He is indeed a talent to watch for the future. ■



AT Awards 2025 open for entries 4 February

The AT Awards recognise the people and projects that demonstrate excellence in Architectural Technology.

Submit entries for:

- Student Project of the Year
- Student Report of the Year
- The aspiration Award for Emerging Talent in AT

Plus NEW categories for 2025!

Sponsored by



UNILIN INSULATION



architecturaltechnology.com/at-awards.html
#ATAwards

From classroom to construction: My AT journey

Words by Sean Auden, CIAT student member, Technological University Dublin

Over the past four years, my journey in Architectural Technology has been nothing short of transformative. Reflecting on my experiences, especially the last year, I find myself proud of the achievements and growth I've experienced. Here's a glimpse into my path from a student to a professional in the field.



Like many students, I was uncertain about my future career during my school years. I had a penchant for technical subjects like construction studies and DCG, and a logical mind that enjoyed maths and physics. When my teachers suggested careers in architecture or engineering, I explored these options through various open days. It was during a visit to TU Dublin's architecture open day that I stumbled upon Architectural Technology. A conversation with a final-year student sparked an interest that has guided me ever since. What drew me to this field was the blend of building technology and performance, and the opportunity to work with leading BIM software. The chance to develop conceptual designs, a task typically associated with architects, was particularly enticing. I realised I had a passion for the diverse skill set that an Architectural Technologist possesses.

Looking back over the year that has passed I can say it has shaped me as a professional and challenged me creatively. My course included a work placement module which gave me the chance to work at KSN Project Management as an Assistant Project Manager. This role allowed me to apply my studies in a real-world setting, albeit in a slightly different capacity. My day-to-day work included speaking directly with architects, engineers, and contractors on a project, whether it be contributing to an online or on-site meeting. Whilst my comprehensive studies in the built environment helped with understanding these discussions, this job challenged my interpersonal skills, being able to adapt my communication style and not being afraid to speak my opinion.

What made this role worth it at the end of each day were the clients I represented – teachers. Whether this was carrying out fit-out or modular classroom projects, knowing that they would help students on a huge scale made those tougher evenings worth it.

Last September I was a Finalist in the WorldSkills Ireland 2024 'Digital Construction BIM' competition, which involves having a comprehensive understanding of all key concepts for a successful BIM workflow.

I competed against the top students across Ireland, where we were tested on Architectural and Structural modelling, as well as clash detection, visualisations, and standard document control. The competition itself was intense, spanning three full days.

What drew me to this field was the blend of building technology and performance, and the opportunity to work with leading BIM software.



The atmosphere was electric, with the best students from across Ireland competing. I remember feeling a mixture of excitement and nervousness, especially during the more complex tasks. Being a finalist was a proud moment for me as it validated my skills and dedication to the field. This experience has solidified my interest in BIM and its applications in the built environment, so I plan to continue participating in similar competitions and aim to pursue a career that allows me to leverage BIM for innovative construction solutions.

Shortly after the competition, I was thrilled to learn that I had won the 'RIAI Henry J Lyons Rising Star in Architectural Technology 2024' award. Entrants were required to submit a synopsis of their third-year work, so I presented my studio project, which focused on the conceptual and technical design of a healthcare centre using engineered timber.

This achievement also granted me the opportunity to speak about my project at the RIAI Conference held at the RDS, where I shared what I believed made my submission stand out to an audience of Ireland's leading architectural technologists, architects, and other professionals. Additionally, I adapted this project for the 'Wood Awards Ireland 2024', emphasising the use and benefits of wood products in construction, and was honoured to receive a 'Highly Commended Project' acknowledgment.

I am currently in my final year of college which means that the weeks are getting busy, with weekly submissions

and presentations – the work doesn't stop. When it gets this busy it can be hard to slow down and reflect on the achievements made, as well as just getting the chance to relax. As I prepare for the next chapter, I look forward to the challenges and opportunities that lie ahead. The field of Architectural Technology is constantly evolving, and I am excited to be a part of its future. I am particularly excited about visiting the United States after completing my course, which I believe will be a rewarding experience and a much-needed break after a very busy year!

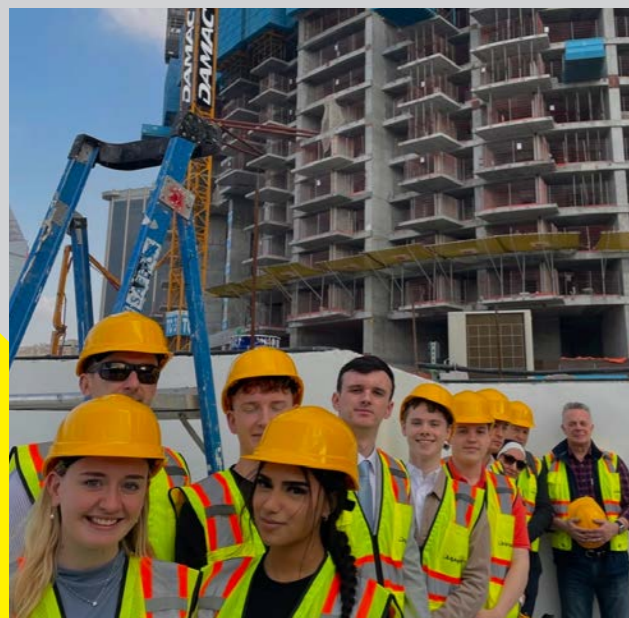




Eye-opening insights on industry in Dubai

Words by Ana Hosseini & Molly Pyper, CIAT student members, Edinburgh Napier University

In our first year on the CIAT-Accredited programme, Architectural Technology, at Edinburgh Napier, we were lucky enough to get the chance to go on a class trip to Dubai, hosted by DAMAC Properties. We both jumped at the chance to go as we knew few opportunities like this came along.



DAMAC provided us with site visits, which we both agree was our favourite part of the trip. On our first official day, we visited DAMAC Cavalli Tower, a luxury residential project, standing at 69 storeys tall. On day two, we visited DAMAC Lagoons, which was an interesting concept. This was a residential village consisting of villas and townhouses which was based on the theme of the Mediterranean. DAMAC Hills was our last site visit, a self-contained community made up of villas, apartments and a hotel.

The sites were still being developed but we got to see a couple of staged villas or apartments so we could get an idea of what the finished product would be as well as the work going on behind the scenes.

It was also fascinating to review the architectural plans before visiting the site, as it's important for us as AT students to fully understand them. We had the opportunity to ask the architects questions about their design choices and learn why they approached certain aspects in a particular way.

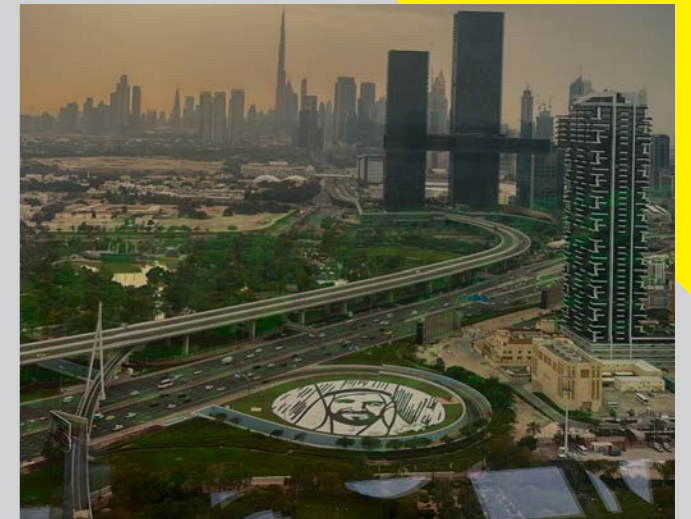


Witnessing the construction equipment in action on-site was incredibly valuable for both the modules we were currently studying and those we would tackle in the future. It provided real-world insight that enhanced our understanding and practical knowledge. The variation of buildings opened our minds to the several types of projects we would hope to be a part of in the future. The luxurious nature attracted our attention as DAMAC worked closely with Cavalli, an Italian luxury fashion company, for the interior details for the majority of the properties.

In comparison to the UK, onstruction workers in Dubai must adapt to its extremely hot climate. During our visit, we were introduced to various methods used to manage these conditions on-site. One example was the practice of mixing ice into the cement to prevent it from setting too quickly in the high temperatures. What impressed us most was that no matter the scale of a project, time efficiency was key. We were amazed at how rapidly these remarkable projects could be developed.

Every morning, we were inspired by professionals from diverse backgrounds and experiences, coming from all corners of the globe. We were especially thrilled to have Dr. Mohammad Baydoun, Senior VP of Development at DAMAC Developments, join us to share insights on their latest projects, what it's like to work at DAMAC Properties, and valuable tips on how to effectively engage with clients and companies.

We also had the chance to meet Laith N. Azzam, who shared the incredible journey of Mr. Nabih Azzam, winner of the RICS 150 Year Award. Although Nabih Elias Azzam Engineering Services LLC is a Chartered Professional Quantity Surveying Practice, it was fascinating for us as future Architectural Technologists to see how Quantity Surveyors collaborate with us. This gave us valuable insights into improving our relationships and understanding with other team members in future practice. We also attended talks from members of CIOB and RICS, which emphasised the importance of becoming chartered after graduation. One speaker who particularly stood out to us was Nick McConnell, a former Edinburgh Napier student who now works and lives in Dubai as a cost manager for Linesight. As Molly and I are both young students who moved away from home for university, we often felt overwhelmed or anxious



about our degree and our future. However, seeing someone who came from the same country and university as us was incredibly reassuring. It gave us a sense of comfort and gratitude, knowing that there are incredible opportunities abroad with top companies and teams for Architectural Technologists all around the world.

The guest speakers were incredibly motivational, reinforcing the importance of reaching out for guidance in person, online or even exploring opportunities abroad.

Beyond the academic aspects, we visited iconic landmarks such as the Burj Khalifa, Dubai Frame, Global Village, and Dubai Mall. As aspiring Architectural Technologists, the Burj Khalifa stood out as our favourite. Its sheer scale and beauty left us in awe, a true testament to human innovation. We truly hope that one day we will have the opportunities to be a part of groundbreaking projects like this.

Our final evening was the perfect way to wrap up the trip. We enjoyed a dinner by the Marina, joined by guest speakers who shared valuable insights about the industry. It was an amazing opportunity to network, ask questions, and gain advice. Their stories were incredibly motivational, reinforcing the importance of reaching out for guidance—whether in person, online through platforms like LinkedIn, or even exploring opportunities abroad.

This trip not only inspired us but also reminded us of the possibilities that lie ahead in our field. We encourage everyone to seize opportunities to learn, connect, and explore—you never know where they might lead! ■



Embracing the Passive House Standard: A unique opportunity for Architectural Technologists

Words by Dr Barry McCarron FCIAT, Chartered Architectural Technologist

As the world confronts a climate emergency, the built environment—responsible for approximately 40% of global emissions—demands urgent innovation.

Architectural Technologists are uniquely positioned to lead this transformation. The Passive House Standard, renowned for its energy efficiency, occupant comfort, and reliance on building science, offers both a challenge and an opportunity to redefine our profession's contribution to a sustainable future.

Passive House: An Architectural Technologist's opportunity
The Passive House Standard emphasises principles such as "fabric first" design, airtightness, and thermal efficiency. These principles align seamlessly with the core competencies of Architectural Technologists, where technical precision and practical application are key.

By addressing the chronic "performance gap" between a building's design and its actual performance, Passive House offers a proven framework for delivering high-performance structures that meet their energy and comfort promises.

In my previous role at South West College, I had the privilege of working on projects such as the CREST Centre and the Erne Campus—the world's largest Passive House Premium building—which showcased the remarkable transformative potential of this standard.

Through these projects, I have witnessed firsthand how Passive House can empower Architectural Technologists to take the lead in sustainable construction and occupant health. While these examples are from Northern Ireland, similar opportunities exist across every region of the UK and Ireland.

A personal case study: Retrofitting resilience
My personal journey with Passive House culminated in the retrofit of a 1970s Irish bungalow, transforming it from a D2-rated building into a Passive House and Net Zero energy

home. This project highlights the critical role that retrofitting plays in addressing national emissions, with the built environment, as previously outlined, accounting for 39% of the total.

In our bungalow retrofit, we retained 66% of the original structure and implemented Passive House techniques such as external wall insulation, thermal bridging, airtightness, triple-glazed windows, and mechanical ventilation all paving the way for successful applications of air-source heat pump and integrated solar PV. The result? A high-performing home with annual running costs reduced from €4,500 to just €1,300 – equivalent to the daily cost of a cappuccino. Additionally, indoor air quality improved significantly, with CO₂ levels in the kitchen averaging 580 ppm, far better than those in most typical homes. This project serves as a replicable model for the 300,000 similar homes across Ireland, highlighting the potential of thoughtful design and energy-efficient technology.

Building expertise: Passive House as a learning platform
The Passive House Standard is not just a design philosophy – it is a learning platform. Its foundation in building physics and energy efficiency provides Architectural Technologists with practical tools to deepen their expertise. Since

By adopting Passive House principles, we can design & deliver buildings that mitigate environmental impact.

becoming a Passive House trainer, I have trained over three hundred professionals, many of whom are Architectural Technologists. The skills they have acquired have equipped them to integrate Passive House principles into their practices, opening global career opportunities through its international recognition.

I strongly encourage those entering the field to pursue Passive House training, which is widely accessible and incredibly valuable for developing a deeper understanding of sustainability. This knowledge equips Architectural



Technologists to take the lead in creating high-performance buildings and addressing the challenges of the climate crisis.

Inspiring the next generation of Architectural Technologists
Adopting the Passive House Standard equips emerging professionals with the skills needed to address climate challenges confidently. This approach fosters a culture of problem-solving, technical precision, and innovation – qualities that define Architectural Technologists. By embracing Passive House, we empower the next generation to lead the transition to a low carbon-built environment.

A call to action
Architectural Technologists have always been advocates for technical excellence. In the face of today's climate emergency, we are called to extend this expertise toward creating buildings that are resilient, sustainable, and energy-efficient. The Passive House Standard offers a structured, scientifically grounded approach to achieving these goals, aligning seamlessly with the core strengths of our profession.

As a CIAT Fellow and passionate advocate for Passive House, I encourage Architectural Technologists to embrace this approach. It offers more than just a professional advantage – it is a societal responsibility. By adopting Passive House principles, we can design and deliver buildings that enhance communities, mitigate environmental impact, and inspire future generations to tackle the climate crisis. Passive House is more than a standard—it is a movement. And as Architectural Technologists, we are uniquely equipped to lead the way. ■



Mentoring: A key to unlocking training success

Words by PLD Mentoring



In the late 19th century, German psychologist Hermann Ebbinghaus conducted groundbreaking studies on memory, leading to his discovery of the *Forgetting Curve*. He found that without application, we forget about 75% of new information within just six days. This highlights the critical importance of putting newly acquired knowledge and skills into practice immediately.

Additionally, research and consultancy business Gartner found that, "Participants are 40% more likely to achieve their goals if they write them down. This increases to 70% if the goals are shared with someone to keep them accountable, such as a mentor." So, what is the role of the mentor in this developmental process?

- Studies show that people apply what they learn more effectively when they have a mentor, somebody who has walked their path previously and who is committed to helping them be successful.
- Having a mentor provides the learner/mentee with the courage to implement what they have learned
- Mentoring provides an opportunity for the mentee to reflect on what is working and what isn't and why. The mentor is able to spot gaps in the mentee's information and can advise them on how they could improve their implementation of their new skills.
- A mentor guides the mentee helping them to implement their new knowledge and skills into their specific work context. They enable the mentee to embed their learning, to practice and receive feedback on their skills and behaviours.
- A mentor can answer questions that may not have been answered during the training course, and help guide the mentee through various situations while understanding the specific obstacles they're likely to face.
- A mentor provides on-going support, advice and guidance to enhance the long-term development of the mentee.
- A mentor provides accountability; w someone with whom the mentee needs to check-in, someone who keeps the mentee focused.

A mentor plays a crucial role in helping you solidify and apply your new knowledge and skills. They act as a sounding board, offering constructive feedback to support your ongoing professional growth. So, the next time you consider attending a training course to gain new skills or knowledge, ensure you have a mentor ready to guide and support you once the course is complete. ■

When you recognise a developmental need, the instinctive response is often to seek out a relevant training course. But is a training course truly the ultimate solution to addressing your growth requirements?

A training course introduces new information, opening your eyes to new knowledge and equipping you with the skills to apply it effectively. It provides a safe environment to explore the benefits and challenges of these new skills, offering opportunities to practice, engage in role-playing scenarios, reflect on the implementation process, and receive constructive feedback from peers. You leave the course inspired and determined to apply what you've learned in the workplace. Yet, despite your best intentions, it's all too common to fall back into old habits.

A recent McKinsey survey revealed that only 25% of respondents felt that training significantly improved performance. Similarly, a report by 24x7 Learning: Workplace Learning found that just 12% of employees actually apply the training they receive in the workplace.

With such discouraging statistics, you might wonder if attending a training course is worthwhile. The answer is yes – training courses are an incredibly effective way to acquire new knowledge and skills. The real challenge arises when you leave the training environment and return to your everyday work. A training course is only as impactful as the mechanisms established to support and reinforce your learning in the workplace.



Everything you need to know before signing an employment contract

Words by Aylin Round, Founder, ArchJobs

Whether you are looking for your first-ever job in the UK or you have held several roles, this guide will highlight why it's important to read and understand your employment contract before signing it.

What is a contract?

Let's start with the basics: what is the definition of a contract? According to the Cambridge Dictionary, a contract is "A legal document that states and explains a formal agreement between two different people or groups, or the agreement itself."

What do you need to know before signing a contract?

It's very important to understand that once you sign a contract, you have agreed to the company's rules. It's highly unlikely that once you sign it, you'll be able to go back and ask for adjustments. That's another reason why you should never rush, take at least a couple of days to read it thoroughly and even ask some friends or family to help you.

Why should you never start a job without a contract?

The reason you should never start a job without a signed contract is because you are not protected. I have heard some horror stories of juniors or overseas-qualified professionals being pressured into starting a new job without having seen or signed a contract. They were not paid the right amount or were let go without any notice. Starting a job without a contract leaves you vulnerable to misunderstandings and disputes over your rights and responsibilities. Without a written agreement, there's no official record of your job title, salary, working hours, benefits, or terms of employment.

Is an offer letter the same as an employment contract?

No, an offer letter and an employment contract serve different purposes in the hiring process.

An **offer letter** is a formal document issued by an employer to a prospective employee, offering them a position within the company. It typically includes:

- Confirmation of the job title and responsibilities
- Proposed salary and any additional compensation (such as bonuses or stock options)
- Start date and location of work
- Any conditions of employment, such as passing a background check

An **employment contract** is a legally binding agreement between an employer and an employee. It goes into more detail than an offer letter and typically includes:

- Specific terms of employment, such as job responsibilities, hours of work, and reporting structure
- Compensation details, including salary, benefits, and any allowances
- Duration of employment (whether it's permanent or fixed-term)

- Terms related to termination of employment, including notice periods and grounds for dismissal

Understanding different types of employment contract

When searching for a job in the UK architectural sector, it's crucial to understand the various types of employment contracts you may encounter.

Permanent contracts offer long-term job security and typically include benefits such as a steady salary, pension contributions, and holiday allowances. However, it's essential to scrutinize details like probationary periods, notice periods, and any clauses related to job responsibilities and performance expectations.

Fixed-term contracts, on the other hand, are set for a specific duration or project and may or may not include the same benefits as permanent contracts. Key considerations for fixed-term contracts include understanding the terms of renewal, the conditions under which the contract can be terminated early, and the implications for job continuity and career progression.

Freelance or consultancy contracts provide greater flexibility but come with different protections and responsibilities - you would also need to determine if your contract is Inside or Outside IR35. Freelancers often handle their own taxes and do not receive typical employee benefits such as paid leave or pension contributions. It's vital to pay close attention to clauses on payment terms, intellectual property rights, and confidentiality to ensure fair compensation and protect your professional interests.

What to lookout for in your new employment contract?

When you receive a contract, you should always check for the following details to ensure they are correct. You'd be surprised how many errors or typos you might find.

- Your full name and other personal details:** Check there are no spelling errors or typos
- Start date:** Confirm that the start date matches what was discussed during the interview
- Job title:** Verify that the job title is correct
- Salary:** Check that the correct base salary is confirmed
- Working hours:** Standard full-time working hours can range from 35 to 40 hours per week
- Holiday allowance:** Ensure they offer at least 20 days plus 8 bank holidays
- Working arrangements:** Confirm whether the role is hybrid, flexible, or office-based
- Bonus structure:** If applicable, check how the bonus is structured and when it is paid
- Notice period:** The standard notice period for permanent employees is 4 weeks, but for more senior staff, it can be up to 3 months. Sometimes, the notice period increases by 1 week for each additional year of service, up to 12

weeks. If you are working as a contractor, you might have a 1 or 2 weeks notice period.

- Job description/responsibilities:** Make sure the job description aligns with what was discussed
- Probationary period:** This can vary, usually from 3 to 6 months
- Intellectual property ownership:** I.e. clarify ownership of items like laptop, designs etc.
- Paid memberships:** Double check if they cover professional memberships such as MCIAT
- Pension contribution:** Check if they offer more than the standard 3%
- Other benefits:** Look for additional benefits such as car allowance, season loan, health insurance, and maternity or paternity leave.

Does your new employer have to pay for overtime?

Employers do not have to pay workers for overtime. However, your average pay for the total hours you work must not fall below the National Minimum Wage. Your employment contract will usually include details of any overtime pay rates and how they're worked out. There are a lot of employers out there who do not pay their staff for overtime, but what are things an employer could offer you instead? Some companies offer Flextime or TOIL (Time off in lieu). Those are usually good alternatives if you work unpaid overtime. Therefore, it is really important to have those details set in your contract.

What to do if you receive two similar job offers?

If you receive two very similar job offers and can't decide which one to choose, read through both contracts and identify differences in their benefits packages. Compare both packages, and you might start to see that one practice puts more emphasis on its training and mentoring scheme, whereas the other offers better holiday and pension contributions. You need to figure out what is important to you and what will help you move your career in the right direction.

What benefits are employees entitled to in the UK?

In the UK, employees are entitled to a range of statutory benefits designed to protect their rights and ensure fair treatment in the workplace:

- Workplace pension:** Employers are required to automatically enrol eligible employees into a workplace pension scheme and make contributions to their pension. As a minimum, you have to contribute 5%, and your employer pays 3%, totalling 8%. Some employers may match your contribution, exceeding the minimum requirements.
- Statutory Sick Pay (SSP):** Employees who are unable to work due to illness are entitled to receive statutory sick pay from their employer.
- Statutory annual leave:** Employees are entitled to a minimum of 28 days of paid annual leave per year, which

can include public holidays. Some job adverts may state "20 days plus bank holidays," totalling 28 days

- Statutory Maternity Pay (SMP):** Pregnant employees are entitled to up to 39 weeks of statutory maternity pay, paid by the employer.
- Paternity leave:** Eligible employees can take up to two weeks of paid paternity leave following the birth or adoption of a child.

Good benefits to look out for in the UK

It can be challenging to assess which company offers the best benefits package when interviewing with multiple practices simultaneously. Here are some key benefits that are worth paying attention to:

Holiday allowance: Look for packages that offer over 24 days of annual leave plus 8 bank holidays. A generous holiday allowance can significantly contribute to your work-life balance.

Enhanced pension contribution: Consider employers who contribute more than the statutory minimum of 3% to your pension.

Enhanced maternity leave: Some companies offer enhanced maternity leave, such as full pay for the first 6 weeks rather than the statutory 90% of average weekly earnings before tax.

Enhanced paternity leave: Look for packages that include over two weeks of paid paternity leave.

Flexible and hybrid working arrangements: Employers offering flexible working hours or hybrid work-from-home options provide greater flexibility in managing your work schedule and personal commitments. Currently, it's quite common for practices to offer two days of working from home.

Paid professional memberships: Financial support for professional memberships (e.g. CIAT) can be particularly valuable, especially considering the rising costs of membership fees.

What should you do after you sign the contract?

Once you are satisfied with the contract, sign and send it back to HR or whoever is the recipient. Always save a copy for yourself as well. I highly recommend emailing or calling the new company to confirm that you have signed the contract. There's always a chance it could end up in their junk folder.

FAQs

Let's address some of the most common questions about employment contracts.

What should I do if the contract states the wrong start date? Simply contact the person who sent it to you and request an amendment to reflect the correct date.

Can I request amendments to my standard contract? Yes, you can. Just because it's referred to as a standard contract doesn't mean changes aren't possible. If you've discussed specific terms such as improved pension terms or holiday allowance, you'll likely need to request these amendments or additions to the contract.

Should I accept the job without seeing the contract?

Never accept a job without reviewing the contract first.

Acknowledge the offer and request the full contract. Take a

few days to review it thoroughly and inform them if you have any questions or intend to sign it.

What should I do if I don't understand a certain section of the contract? If you find a section of the contract confusing, it's perfectly fine to seek clarification. Reach out via email to the person who sent you the contract and ask for clarification in writing.

How long can I wait before signing the contract? Typically, when you receive a job offer, you'll receive the contract within a few working days and usually have about a week to sign it. It's worth asking them when they need the signed contract returned. If they indicate an unusually tight deadline like by tomorrow lunchtime, it could be a red flag. Practices shouldn't pressure candidates unnecessarily.

Urgency might be understandable for contractor roles needing immediate support on projects.

What happens if I wait too long before signing the contract? If you delay more than 7 working days without communicating with

the new practice, they may withdraw the offer and consider other candidates. Companies can't wait indefinitely for a decision.

What should I do if the offered salary is low? If you receive an offer with a lower-than-expected salary, you have three options: decline the offer, accept it, or negotiate for a higher salary.

If I get promoted, will I receive a new employment contract?

If you're promoted within your current practice, it's likely you'll receive a new contract. As always, review all details carefully and seek clarification if anything is unclear.

Summary

Securing a new job is an exciting milestone, but it's crucial to approach it with careful consideration of your employment contract and benefits. Before signing, take a few days to thoroughly review the contract, ensuring all terms align with what was discussed during interviews. Look out for key details such as salary, working hours, holiday entitlement, and specific benefits like pension contributions and maternity leave.

Understanding the differences between an offer letter and an employment contract ensures you know what you're agreeing to before making a commitment. Benefits vary widely among employers, from flexible working arrangements to professional memberships and performance-related bonuses. It's essential to prioritise benefits that support your career goals and personal well-being.

Finally, don't hesitate to ask for clarification on any contract terms or benefit packages that are unclear. Negotiate where possible and ensure everything agreed upon is documented in writing. Remember, just because they said "That's our standard contract" it doesn't mean it can't be amended. ■

Starting a job without a contract leaves you vulnerable to misunderstandings over your rights & responsibilities

Don't hesitate to ask for clarification on any contract terms that are unclear.



Hands-on learning in Glasgow City

Words by Natasha Lee, CIAT student member, Robert Gordon University

Stage 3 & 4 students from the CIAT-Accredited BSc (Hons) Architectural Technology programme at Robert Gordon University (RGU) extend their gratitude to CIAT aspiration Scotland East for the opportunity of their recent trip to Built Environment – Smarter Transformation (BE-ST).

Students from the Scott Sutherland School of Architecture and Built Environment enjoyed a two-day trip to Glasgow, packed with insightful workshops and valuable opportunities. Highlights of the trip included a visit to the City of Glasgow College and a factory tour accompanied by a workshop at BE-ST.

With a bright and early start, students and lecturers Dr. Jonathan Scott FCIAT and Jamie Yorkston MCIAT set off for City of Glasgow College. The group were greeted by college lecturer Laura Jayne Gillies, who led a tour of the campus. She shared insights into the design and construction of the building, completed in 2016. AT students were particularly interested in the entrance staircase and the segmented open roof courtyard, designed to connect students with the outside world from the building's upper levels. The tour concluded with a visit to the Old Lighthouse Material Library, where both students and

The most interesting materials we saw were sheep's wool, k-BRIQ, straw wall panels, various wood types, and hemp –
Andrew Cowie, Stage 4 AT

lecturers explored the wide range of materials housed within the college.

In the afternoon, the students attended a CPD session hosted by the Scottish Ecological Design Association (SEDA). The session, that focused on inclusive design for individuals with learning disabilities, was organised by Magdalena Blazusiak MCIAT, PHD researcher at RGU. The guest speakers expressed the everyday struggles they face within public and private buildings due to a lack of inclusive design. Their experiences highlighted that a single regulatory standard cannot address the diverse needs of all disabilities and may inadvertently make a building less functional for some individuals.

Considering how design can either empower or hinder individuals with disabilities left a lasting impression on the students and will influence how they approach their future work.

The session continued with a presentation from professional bodies in the industry sharing their experience and knowledge around designing for a wide range of disabilities and needs. They highlighted challenges such as navigating regulation standards, balancing costs, and meeting clients' design requirements. The speakers also emphasised the importance of future regulation changes to ensure that both domestic and non-domestic buildings will be standardised

Small details make big differences and shows how much we could benefit others –
Sam McMillan, Stage 3 AT

to provide equal access for all. Overall, the first day was highly insightful for the students and they left ready for the next morning's tour of the BE-ST centre.

BE-ST provides the connections, infrastructure and culture needed to solve the sector's most pressing challenges. The team at BE-ST solve challenges

ranging from the need for zero-carbon buildings to inclusive standards, working alongside universities, colleges, researchers, and built environment experts. BE-ST are accelerating towards zero carbon standards and providing ready solutions for the built environment, currently and into the future. Based in Scotland, BE-ST aim to reach global levels to connect and demonstrate their solutions as an international centre.



Impact Manager, Sustainability, Tom Warren MCIAT and Associate Impact Manager, Kieran Dick-Doyle led a tour of the factory, broadening the students' knowledge of materials currently on the market. They explained their manufacturing process and the advantages

of this compared to others in the market. The tour began with the Recycled K-Briq, a sustainable, low-carbon product created using nearly 100% recycled construction,

Our home is Scotland but our reach is global –
BE-ST

demolition, and excavation waste. Next, they explored a 1:1 scale timber Passive House building, showcasing principles of reuse and circular economy for a neighbourhood as a central principle.

This design development can be used in retrofit and new builds to allow flexibility across future projects. Students also learnt the importance of airtightness and the sequence and purpose of material build-ups. They particularly enjoyed looking at The Social Bite Nest House which uses Ecosystems Technologies to help alleviate homelessness by delivering a new design for charity and social business, Social Bite, to present for their Social Bite Village development.

Following the tour, Tom and Kieran led an interactive workshop focused on constructing passive-standard walls. Working in groups, the students were tasked with attaching a breather membrane to a timber frame. Each step of the process was demonstrated and the groups worked together to hold and use the correct techniques and tools to produce the most efficient and effective way of preventing air from escaping.

Overall, the students found their two-day experience highly beneficial and informative for their academic and professional development. The trip served to expand their knowledge in a multitude of ways, from the eye-opening tour of City of Glasgow College to the interactive workshop at the international centre of BE-ST. Experiences such as these inspire fresh perspectives on shaping the future of the built environment. ■



Designing my future: Architectural Technology and university life

Words by Michael Briones-Yien, CIAT student member, University of West London



Sometimes it is hard to understand why we do what we do, but the answer may be related to our childhood.

From a young age, I've been drawn into knowing how things work and fit together – spending hours sketching and dismantling objects just to see what was inside. I vividly remember my friends and me stacking bricks at nearby construction sites, guided by ingenious floor plans drawn at home. (Disclaimer: in hindsight, construction sites are not an advisable place to play!)

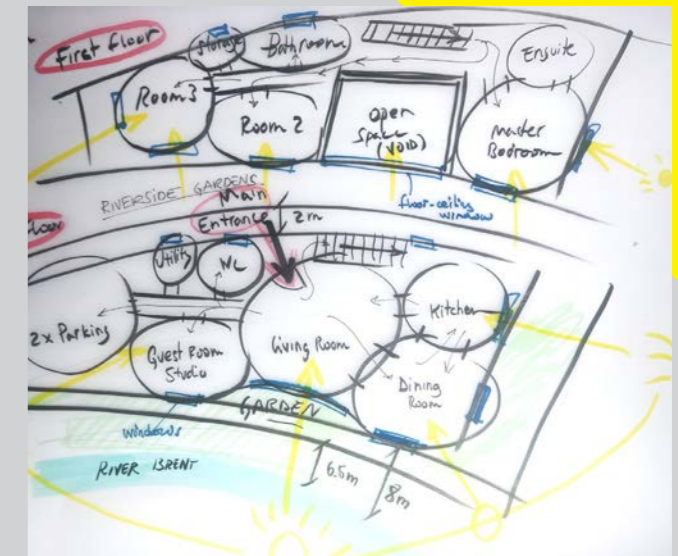
In secondary school, I discovered technical drawing and was captivated by how geometry translates measurements into 3D perspectives so precisely. Being able to draw my ideas on paper and see them take shape was really satisfying. That's when it became clear that my passion was guiding me toward architecture and engineering.

My educational background has always leaned more toward science and technology than art. This focus shaped my approach to architectural technology. I was drawn to the hidden, functional systems within buildings rather than their external aesthetic. However, over time, I've come to appreciate the importance of the visual aspect too. Good design doesn't just make a building visually appealing – it can shape how people feel, interact, and even how communities grow.

After completing my HNC in the Development and Implementation of Construction Projects in my hometown of Madrid, Spain, the 2008 global economic crisis had already disrupted the construction industry and put a halt to many opportunities. Consequently, I moved to the UK, not only drawn by the beautiful architecture here – particularly the Art Deco buildings that have always caught my eye – but also my love for British pop culture.

A few years later, I applied for CAD designer roles but eventually realised the importance of adapting to the UK's construction standards, regulations, and frameworks if I wanted to succeed. That is what led me to enrol in the CIAT-Accredited programme, Architectural Technology and Design, at the University of West London (UWL).

At UWL, I've had the chance to brush up my CAD skills, learn new tools like Revit and realise how Building Information Modelling (BIM) is transforming the industry. BIM streamlines the entire process of designing, constructing, and managing projects, making it faster and more efficient. While I understand the reluctance of some more traditional companies to fully adopt and embrace it, I remain optimistic. Emerging technologies, combined with a new generation



of forward-thinking professionals and advancements in AI will continue to reshape and move things forward for everyone in the industry.

One of the highlights of my time at UWL has been my recent nomination for the CIAT Greater London Regional Architectural Technology Student Awards 2024 where I was selected as Highly Commended for my second year project. It was an exciting and affirming experience – an opportunity to connect with peers, industry professionals, and talented students from other London universities in a celebratory atmosphere. This recognition not only acknowledges my work and potential as an ADT student but also enhances my professional profile, which may open doors to networking and mentorship opportunities, showcasing my dedication to architectural innovation and technology.

Another aspect of my studies that I appreciate is the diversity of people I have met at UWL. Collaborating with peers and professors from different cultural and professional backgrounds has added depth to every project. Working together towards a common goal and creating thoughtful, effective designs has highlighted the

I was drawn to the hidden, functional systems within buildings; good design can shape how people feel, interact and communities grow.

value of diverse perspectives and teamwork. There is a unique magic in sitting at the same table with people from all walks of life, each bringing their own experiences and visions for a better built environment.

There is a lot of talk about how we can make the built environment

more sustainable and eco-friendly, and while these discussions often lead to idealistic ideas and yes, some heated debates, sustainability is complex – it's tied up with economics, politics, and sometimes conflicting interests. But that doesn't mean we shouldn't try. If we truly want to make a difference for the present and future of the planet and its inhabitants, we must strive for environmental sustainability, social integration, and economic growth at every stage of our projects. It's a challenge, but one worth taking on.

Let's work together for a better world. ■





Embracing new beginnings

Words by Emmett Heron ACIAT, Architectural Technologist, Roberts Limbrick

Moving to England from Northern Ireland this year has been an exciting adventure, and joining the Roberts Limbrick team in the Gloucester office has been an amazing experience.

New start

I have had the opportunity to tick a lot of things off the tourist's to-do list here in Gloucester, including the Waterways Museum, the Quays outlet, Orchard Street market, the Food Festival, Gloucester Cathedral, and both Wetherspoons.

Working as an Architectural Technologist has been incredibly rewarding. The team have been very welcoming, and the monthly social events organised by the company have made it much easier to meet new people and make new friends.

The projects I have worked on so far have been more prestigious than anything in my previous employment. I am consistently using the latest Revit software for large-scale projects that require collaboration with other design disciplines.

Creating technical details for a variety of projects has allowed me to explore and expand my own skillset and deepen my knowledge of construction methods. Previously, residential projects were the focus of my experience but I have now

had the opportunity to work on a range of commercial, mixed use, leisure and retail projects that have broadened my understanding of architectural design and the process involved in different applications/tenders.

Work/life balance

The office work is busy and fast-paced, including drawing and designing as well as attending meetings, team calls, site visits and email correspondence. Roberts Limbrick offers flexible start and finish times with core hours of 10:00 to 16:30 and a one-hour lunch break. Having a Christmas shutdown is exceptionally generous and helpful for planning around the holidays, especially for me travelling by ferry across the Irish sea.

A typical day at the office starts at 08:00 and ends at 16:30. I begin by checking emails and making coffee, drafting proposals or making revisions to project drawings based on client or project manager feedback. I use Revit to create 3D views and AutoCAD for 2D technical drawings, producing floor plans, sections, elevations, and details. I also ensure project information is recorded accurately, including Progress

14 things I would do if I moved to a new city/new role

1. Become a member of my local CIAT Region or Centre after passing my probationary period with my new employer.
2. Attend the Regional/Centre Committee meetings to help build my network in the area – I recognise the importance of getting involved with the community for my professional development.
3. Attend CPD sessions in the office or suggest relevant CPD that meets requirements and has relevance to current projects.
4. Contribute an article to *aspiration Magazine* – a previous article I wrote was based on my work placement. I believed my experience was useful and might benefit others who were unsure of participating in a placement year. Sharing experiences with the community helps expand the wider knowledge of students and graduates
5. Enter competitions – using it as an opportunity to showcase my skills and interpretation of a brief.
6. Use my experience to contribute information and guidance to the community, mentoring junior colleagues while seeking guidance from more experienced ATs on skill development routes such as courses in Passive House design.
7. Set clear goals during annual performance reviews, working with my supervisor to assess strengths, weaknesses and areas for growth.
8. Develop previous projects from my portfolio in Revit or other software.
9. Attend social events hosted by other professional bodies to extend my network and meet professionals from other fields. Socials such as pub quizzes, pool/snooker exhibitions and coffee mornings are great for networking.
10. Free hand sketch technical design elements to develop my understanding of more complex detail items.
11. Research local planning and building regulation application processes; most building authorities have moved to electronic applications.
12. Create a working knowledge of the design process, focusing particularly on stages 3-5. Developing my understanding of how these stages align with client comment and review submission, planning application process, tendering and building regulations application submission.
13. Writing articles or creating content for Architectural Technology publications to share insights and experiences with the community.
14. Build a professional social media presence through platforms such as LinkedIn, to promote my work as an Architectural Technologist and connect with professionals that I don't have the opportunity to network with in person.

Tracker forms, and attend site visits for progress meetings with the team.

Projects

Having all my projects based in England was the driving point of my decision to relocate. The planning and regulations in England are slightly different to Northern Ireland but the construction methodologies that I have had the opportunity to explore as an Architectural Technologist have developed my understanding of building design.

A focus on the BIM process and collaboration between design disciplines due to the large scale of the projects/frameworks have been extremely important for the smooth execution of many projects. ■

Creating technical details for a variety of projects has allowed me to explore and expand my own skillset and deepen my knowledge of construction methods.

Shaping the future: Technical demonstrations at Cardiff Metropolitan University

Words by Ryan Davies ACIAT, aspiration Wales Chair

CIAT Wales Region recently hosted an inspiring Technical Showcase event at Cardiff Metropolitan University, aimed at providing Architectural Design & Technology students with a unique learning experience.

The event was designed to transcend traditional classroom teaching, offering students valuable insights through a variety of CPD sessions, live demonstrations, and an up-close look at the construction industry in action. It featured presentations on practical considerations for future detailing, while also helping students establish early connections within the industry.

The idea behind the Technical Showcase was simple yet impactful: to offer students an immersive experience that highlights the complexities and opportunities of the architectural and construction industries. While classroom learning provides the foundation, understanding how these principles are applied on-site is essential for students entering the profession. By engaging with experts, observing live installations, and asking questions in real-time, students were able to connect theory to practice in a way that traditional teaching cannot fully replicate.

The event featured a variety of sessions focused on key aspects of the industry, such as sustainable design, material performance, and fire safety considerations. A standout

element was the live demonstrations, where students could watch and connect with professionals. These demonstrations gave students a front-row seat to see how different elements interact, why design decisions matter, and how every detail contributes to a building's overall performance.

The Technical Showcase wasn't just about transferring knowledge, it was about inspiring the next generation of Architectural Technologists. Through collaboration with manufacturers, contractors, and industry leaders, the event demonstrated the power of partnership and innovation, offering students a glimpse into the careers they're preparing to enter.

Ryan Davies ACIAT, aspiration Wales Chair, said:

It was incredibly rewarding to see the students so engaged and inspired, and we're eager to see how they apply these insights as they advance in their careers. Having been a student on this programme just three years ago, I'm passionate about bridging the gap between students and industry. I believe this form of visual learning would



have significantly enhanced my own experience, and I'm grateful to now be in a position to provide this opportunity to the future of Architectural Technology.

Sebastian Chucas, Project Specification Manager, introduced the advantages of using Rockwool products, with a focus on fire safety considerations during the design process. This was followed by a live installation of a rainscreen system using Rockpanel and Rockwool products, with the students being guided step-by-step to understand how various components interact and the importance of detailing in real-world applications.

Another standout feature was the Rockwool Demo Truck, which brought the brand's high-performance insulation solutions to life. Students were able to experience the acoustic tunnel, showcasing the soundproofing capabilities of Rockwool products, and observe how these materials resist fire and water in controlled demonstrations. It was a fascinating way to understand the practical benefits of these technologies beyond what can be conveyed in a classroom.

Alumasc Roofing delivered an engaging session centred on sustainable roofing applications, seamlessly combining technical expertise with live demonstrations. Their presentation emphasised key design considerations, from selecting the right materials to ensuring long-term performance and maximising environmental benefits.

It aided us in understanding the practicality of assembling a detail - Ben, student

The students were then taken through the various layers of different roofing systems by Alumasc's technical team, gaining a clear understanding of critical components like drainage, waterproofing, and vegetation. Each element's purpose was explained in detail, illustrating how they work together to create effective, sustainable systems while protecting our buildings from the elements.

Morgan Sindall supported the event by arranging a diverse range of sub-contractors to ensure its success. Their social value team is excellent in engaging with meaningful initiatives, offering potential placements to enthusiastic students. Additionally, one of their design managers, with a background in Architectural Technology, delivered an inspiring presentation on their career journey. They highlighted the various avenues available for students to progress in their careers, as well as sharing valuable insights on detailing, design considerations, and professionalism—benefiting everyone in the room, from students to professionals alike.

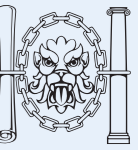
Sebastian Chucas commented:

I was thrilled to support the students at Cardiff Met during their interactive seminar day. It was an incredible



opportunity for the students to touch, feel and witness the performance of Rockwool products and experience the functional capabilities that insulation can deliver such as sound, fire, water, and thermal performance. Our vehicle, equipped with an onboard acoustic tunnel and test apparatus, provided a demonstration of these functional capabilities. Observing the live installation of our insulation and cavity barriers on a Rainscreen cladding rig offered students a comprehensive understanding of how various products integrate to form a safe and efficient wall system. Seeing the entire process in action is truly invaluable, and I hope it left a lasting impression on everyone who participated.





CIAT Accredited Programmes in Yorkshire (as of June 2024)



Leeds Beckett University:
MSc Architectural Technology and Design



Leeds Beckett University:
BSc (Hons) Architectural Technology



University of Huddersfield:
BSc (Hons) Architectural Technology

- ▶ Sam William Lambert MCIAT
- ▶ Chair
- ▶ Chartered Architectural Technologist at P+HS Architects
- ▶ Location: Northallerton, North Yorkshire



NORTHALLERTON

NORTH YORK MOORS

YORKSHIRE DALES

- ▶ Jamie Greenwood
- ▶ Group member
- ▶ Architectural Technologist at DLA Architecture
- ▶ Location: Leeds, West Yorkshire



HARROGATE

- ▶ Kashish Kalawadiya ACIAT
- ▶ Vice-Chair
- ▶ Architectural Technologist at Enjoy Designs
- ▶ Location: Leeds, West Yorkshire



YORK

BRIDLINGTON

- ▶ Kieran Ashton ACIAT
- ▶ Group member
- ▶ Architectural Technologist at HTC Architects
- ▶ Location: Leeds, West Yorkshire



LEEDS

BEVERLEY

BRADFORD

- ▶ Anmol Lall ACIAT
- ▶ Vice-Chair
- ▶ Architectural Technologist & Designer at Elite Systems GB
- ▶ Location: Cleckheaton, West Yorkshire



WAKEFIELD

- ▶ Vera Yordanova ACIAT
- ▶ Vice-Chair
- ▶ Architectural Technologist at LNT Care Developments
- ▶ Location: Garforth, West Yorkshire



HULL

HUDDERSFIELD

- ▶ Tariq Nazir ACIAT
- ▶ Group member
- ▶ Architectural Technician at Lonie Lozano
- ▶ Location: Huddersfield, West Yorkshire



ROTHERHAM

DONCASTER



SHEFFIELD

- ▶ Raychelle Lemi ACIAT
- ▶ Group member
- ▶ Architectural Technician at CODA Studios
- ▶ Location: Sheffield, South Yorkshire

aspiration Yorkshire Group members & CIAT Accredited Programmes

Scan the QR to register your interest!



CIAT aspiration

Nurture. Network. Develop.

Issue 19
Autumn/Winter 2024

