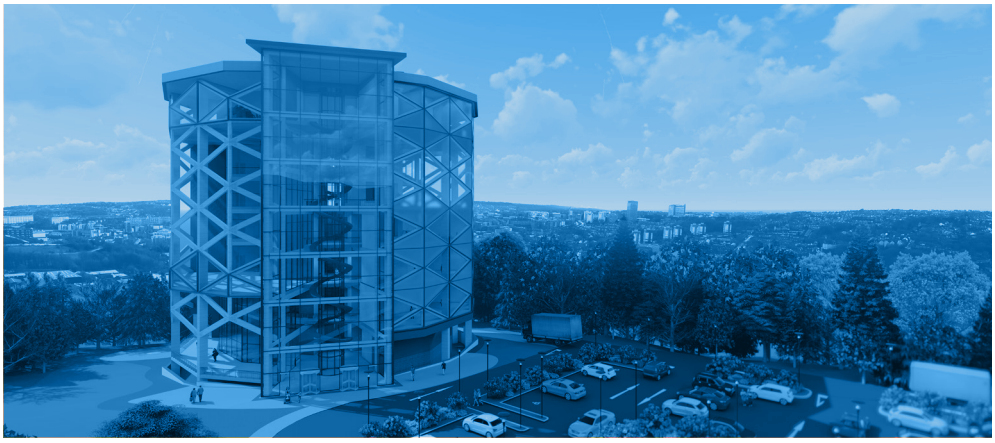
aspirATion

The magazine for aspiring
Architectural Technology professionals

AT Awards | Students



BIM
WorldSkills

Apprenticeships

Issue 9
Autumn 2019

Welcome to issue nine of aspirATion magazine!

A word from the Editor...

For those studying, I hope everyone has now settled into the new academic year. I am excited to be bringing you a collection of interesting and insightful articles to assist you in your studies, at work and for your future career.

In this issue, student members share their experiences of opportunities they have taken, such as final year projects, placements and overseas travel. AT Awards | Students is your chance to have a look at the 2019 winning entries (pages 8-11) and inspire you to enter the 2020 Awards! Hear more about the aspirATion initiative, how you can get involved and see what some of the aspirATion Chairs have been up to over on pages 15-17.

Don’t forget: this publication is for YOU and a chance to have your say and share your experiences, successes, tips and more with your peers. If you want to submit an article for consideration for a future issue, please do get in touch.

Alison Blow
Editor

Education and Membership Administrator
alison@ciat.org.uk

Celebrating Architectural Technology at its best, nationally and internationally

AT Awards | Students
The AT Awards | Students have been designed to recognise excellence in Architectural Technology globally and are open to student members, based nationally and internationally. There are two categories:

- The Student Award for Excellence in Architectural Technology Project
- The Student Award for Excellence in Architectural Technology Report

The 2020 AT Awards open on 3 February 2020

AT AWARDS

Find out more at
ciat.org.uk/awards.html
#ATAwards

The judges this year were very impressed with the high quality of submissions and commented on the creative knowledge and skills that Architectural Technology students showcased in their work.

Take a look at the 2019 AT Awards | Students Winners...

© Albert Greenhalgh

Student Award for Excellence in Architectural Technology | Project

WINNER

Architectural Technology Studio 3

Albert Greenhalgh,

Sheffield Hallam University

The project has been undertaken as the second phase of an existing phased development proposal by EXTREME, a global lifestyle brand . The brief was to design an extreme sports facility, with the main attraction being a 25m high ice climbing wall. In taking a sustainable approach to the design, the success of the building came down to the primary structure which originally started as monolithic concrete frame. However, through material development and different approaches to make the building efficient, spacious and have a strong visual impact, it resulted in a repeating glulam frame construction with an in- situ concrete core.

The concrete core encapsulates the ice climbing wall and, in the process, efficiently segregates the frozen atmosphere from the other internal spaces in the building where the glulam frame acts as a shell. The frame supports a curtain wall system that helps to maintain the internal thermal environment, as well as provide the views out of the Sheffield skyline at every level of the building. ■

Visit **ciat.org.uk/awards.html** for full insight into the winning projects and Finalists

The kitchen 3D render in Maggie's Windermere by Kirsten Adjei-Attah

HIGHLY COMMENDED

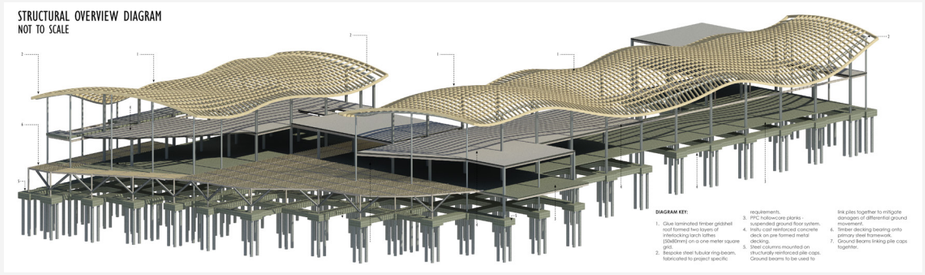
Maggie's Windermere

Kirsten Adjei-Attah ACIAT,

Coventry University

Maggie's Windermere is a conceptual cancer support centre based in a picturesque location at the heart of the Lake District. A Maggie's Centre is a place that offers practical, emotional and social support to people living with cancer and all friends and family affected by the disease. A building with three interconnected spaces in a stepped layout would be the most effective proposal in defining spaces for communal and private use with easy access to services e.g. accessible WCs.

The building materials incorporated have been selected in mind of the physical side effects of treatment a patient experiences, such as specifying timber handrails and having an exposed thermo-treated Tulipwood CLT interior to accommodate a patient's sensitivity to touch and using robust and non-toxic materials. Inclusive design was incredibly crucial for Maggie's Windermere. Three access routes have been provided (two stairs and one ramp) to ensure users of the building will enter and leave safely. ■



Structural overview diagram of Thorpe Lakes by Aaron Edge-Stenson

COMMENDED

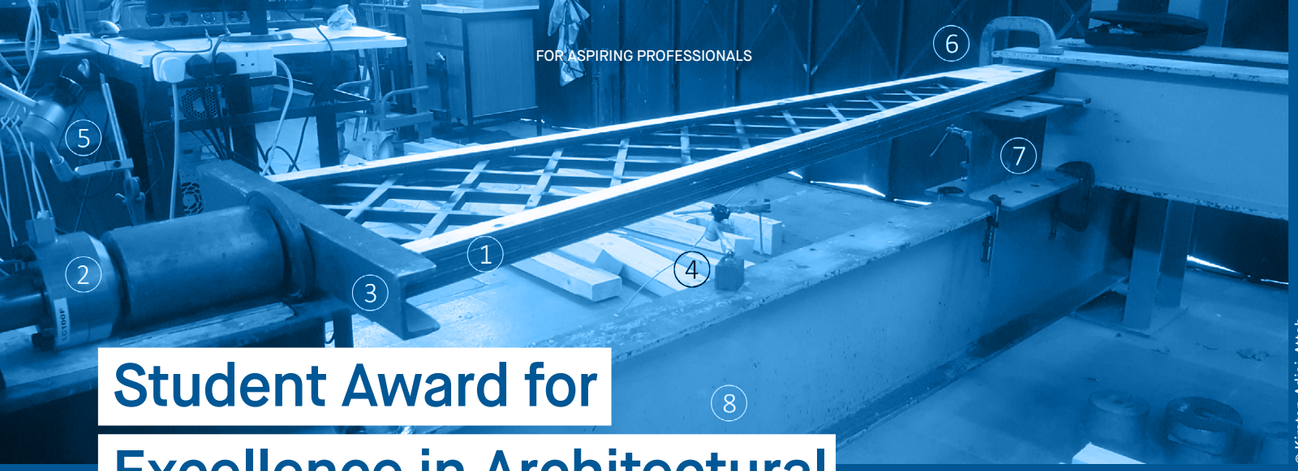
Thorpe Lakes: Museum & Visitor Centre

Aaron Edge-Stenson ACIAT,

Nottingham Trent University

Thorpe Lakes Museum and Visitor Centre is a proposal for a state-of-the-art sustainable facility, situated within the heart of Lincolnshire sub-regional country park. The 6500m^2 development seeks to educate users about the natural environment, and provide a natural home for the activities of the Lincolnshire Wildlife Trust. The rolling roofscape of the building echoes the natural undulation of the surrounding landscape and serves to conceal the building, allowing a seamless fusion between the architecture and the natural environment.

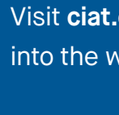
A primary steel frame will form the skeletal framework for the building. This framing system provides high strength yet a relatively low weight structure. The roof design features a curved shell formed from 50mm wide x 35mm thick larch laths in four layers. The extensive use of timber grishell technology is a reinterpretation of traditional materials and methods. Using this technology allows the building to adopt an organic form, which allows the building to blend in with this ecologically sensitive site. ■



© Kirsten Adjei-Attah

Student Award for Excellence in Architectural Technology | Report

WINNER



Testing the Compressive Strength of Timber Lattice Columns for Low Rise Construction

Kirsten Adjei-Attah ACIAT,
Coventry University

Three full-scale column prototypes consisting of diamond, triangular and circular lattice infills were fabricated and tested to determine whether the geometrical arrangement of the internal lattice structure affected the compressive strength of the column. The purpose of this research was to undertake research into lightweight structural timber elements with varied lattice infills for low rise construction, particularly for hospices and palliative care facilities where uplifting spaces are essential for therapy, treatment and end of life care.

The study was highly important to assess whether the columns could satisfy the structural requirements needed to support the CLT roof system. Results found that all columns performed well beyond the minimum structural requirements to support a roof load of kN/m2 which means each column can be considered safe for use in construction. Findings concluded the porosity volume (cellular voids) had a significant impact on the compressive performance, the lattice column with the circular lattice proving to be the highest performing column failing at 31.46kN (3.16 tonnes), due to increased surface area of material. Nevertheless, the diamond lattice infill column was an efficient lightweight alternative. ■

Visit **ciat.org.uk/awards.html** for full insight into the winning reports and Finalists

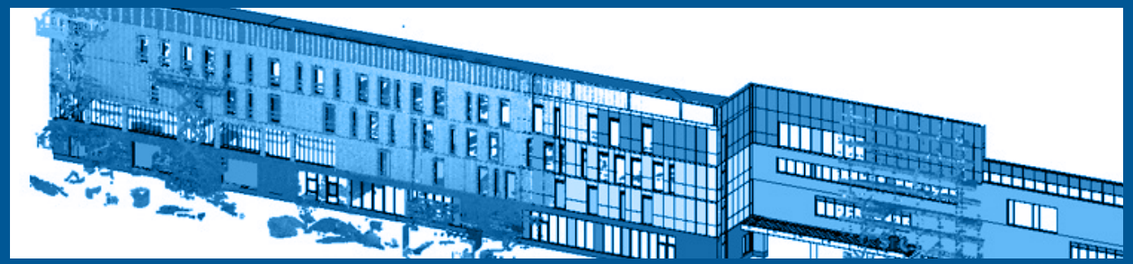
HIGHLY COMMENDED

Verifying the Postioning of Passive Fire Protection in Ventilated Rainscreen Building Wall Envelopes

Michael Daly,
Ulster University

Ventilated facade systems have become popular over recent years due to the range of styles and profiles which allow most aesthetical intentions to be realised. This, coupled with the general robust performance and ease of construction, means they are a popular choice for contemporary buildings. However, with ventilated facades, like with any envelope, there is the potential for passive fire protection issues, with the performance in a fire dependent on the workmanship detailing, especially with regards to cavity barriers, and the materials used during the construction.

The research triangulates the stated issues relating to quality via a focus group discussion with industry professionals, with a focus on fire safety, before the potential for a technological solution presented in the form of a clash detection analysis using captured point cloud data of in-progress construction work linked to a project building information model. This study suggests that the current means of visual inspection is not adequate for ensuring the in-built performance of fire safety measures. Therefore, there is a need for increased supervision on construction sites or other means which can verify the veracity on constructed details. ■



Revit model by Michael Daly

© Catriona Slane

COMMENDED

An Investigation into Wayfinding Design Techniques Employed in Healthcare Facilities in Northern Ireland and the Need for Wayfinding Standards

Catriona Slane ACIAT,
Ulster University

Wayfinding is the process of determining location and orientation and then planning and following a route to the desired destination. Through a case study methodology this research project evaluates the current wayfinding schemes implemented within healthcare facilities in Northern Ireland and assesses how well they perform. Two local hospital facilities were selected, one being a relatively new complex opened in 2017, and one which has been operational for over 50 years.

Although the wayfinding systems in place at both hospitals display considerable potential, the discrepancies found raise the issue that only sub-par guidance is available and that without any enforced standard there is much divergence from current best practice methods. The research concludes by proposing the notion of a standard set framework for Wayfinding. A solution that could be a collaboration by a range of relevant parties; and managed and enforced by a regulatory body. Such a standard would allow for more robust wayfinding design in hospital settings. ■

aspirATion

supporting, networking and developing young professionals.

“What is aspirATion?” is a question posed to us at CIAT from time to time. To find out more and how to get involved in the initiative, read on...

Please email Alison Blow (alison@ciat.org.uk) to be put in contact with your local aspirATion Group.

What is aspirATion?

aspirATion supports students, recent graduates or newly qualified professionals entering the discipline, as well as working with CIAT to help shape the future of Architectural Technology. It is a dynamic, forward-thinking and inclusive network, acting as the gateway into furthering your career within the discipline.■

Who contributes to aspirATion?

aspirATion is a community within CIAT providing the opportunity for young professionals to develop and grow on a personal and professional level, whilst inspiring the next generation of Architectural Technology professionals.

It operates at Region/Centre level across the Institute’s Regions and two of its Centres (the Republic of Ireland and Europe Centre) with an aspirATion Chair overseeing their Group. These Region/Centre Groups are then represented nationally by the overarching aspirATion Committee.

The structure of each Group is flexible and it is up to each Chair how they operate. All aspirATion Chairs and those within their Group are volunteers.■

There is something for

everyone in aspirATion, from CPD

seminars through to networking events

aspirATion is the gateway

into furthering your career

within the discipline of AT

What does it do?

One of aspirATion's main aims is to welcome and assist students, graduates and newly qualified members into the profession. They host events such as site visits, practice interviews, networking events and social gatherings on a regular basis.

aspirATion offers much more than just events – aspirATion Groups engage regularly with schools and universities through presentations and careers fairs, helping to encourage the young professionals of tomorrow into the sector. The Chair is also responsible for collating all concerns and observations from students and the professionals they have engaged with and raise them at the aspirATion Group Committee meeting (two of these are held each year).

The aspirATion Committee Chair represents the Committee at Council, where aspirATion has a vote. aspirATion collaborates with other groups within the built environment such as 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 endless; 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. The continued success of aspirATion relies on new members getting involved, attending events and sharing their views.■

How can you get involved?

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

You can contact Alison Blow at Central Office by email alison@ciat.org.uk or +44 (0)20 7278 2206. She will be more than happy to introduce you to your Region/Centre Committee as well as your aspirATion Group. Get in touch and become involved with aspirATion and CIAT! ■

aspirATion Group: Current vacancies

aspirATion Group currently has vacancies for the role of Chair in the following Regions/ Centres:

- East Midlands
- East Anglia
- Republic of Ireland Centre

The Chair will work with the established Region/Centre Committee, educational establishments running CIAT Accredited Programmes, colleges, peer groups such as neigbouring aspirATion Groups, members of BRE Academy, CIOB Novus, RICS Matrics, and industry professionals within the Region/Centre to organise events, which include socials, CPD or site visits.

To apply, you need to submit a personal statement outlining why you would be suitable for the role of Chair relating to the aspirATion Group terms of reference:

- Provide a focal point for the Institute's activities and objectives with respect to all future AT professional members;
- Maintain a dialogue between the aspirATion Group and the Institute's other Groups and Committees regarding any issues that may affect future CIAT members and to ensure that they are not adversely affected by any of these issues;
- Raise awareness of Institute activities, objectives and constitutional processes;
- Increase the potential for participation among current students and
- Increase awareness of the discipline and the Institute to potential AT and other associated professions.

You must be either a student member or Associate member, profile candidate, Chartered Member or professionally qualified Architectural Technician for five years or less. Please send your personal statement to education@ciat.org.uk by **Monday 9 December 2019**.

Meet the Chairs

aspirATion CHAIR

Rori Millar MCIAT
Northern Ireland Region

Rori has been involved with CIAT since graduating from Ulster University in 2012 as an acting member of the Northern Ireland Regional Committee, gaining Chartered status this year. In 2014, he and university colleague Matt Weir ACIAT founded the Young Architectural Technologists' Network (YATN), a fore runner of aspirATion, of which Rori is the current Chair.

With a keen interest in BIM and as a leading figure within the BIM network in Northern Ireland, Rori sits on the NI BIM Steering Group. He is also honoured to be a Northern Ireland Ambassador for the Architects' Benevolent Society, a charity that is dedicated to helping architectural technology professionals, architects, assistants, landscape architects – and their families – in times of need.

> 'Where processes have remained unchanged for years, Rori has a passion for finding innovative solutions in order to complete tasks'

He is Head of Digital Construction for the Newry based contractor Felix O'Hare & Co Ltd and leads the Integrated Project Team through design development and verification stages. Rori loves his job; no day is the same! BIM is all about collaboration and he loves interacting with the different roles that it takes to complete a project. He has a passion for finding innovative ways for completing tasks where processes have remained unchanged for years. Solving problems for people gives him great satisfaction. ■

aspirATion VICE-CHAIR

Kirsty Murray MCIAT
Scotland East Region

Kirsty qualified as a Chartered Member in 2015 and has been heavily involved in the Institute ever since. She was one of the first aspirATion Chairs, representing Scotland East and establishing an active networking group and sub-group in Edinburgh.

She has since moved on and taken on the role of Vice-Chair for aspirATion, and from autumn 2019 will take over from Rori as Chair. Away from aspirATion, Kirsty is also an Interview Assessor for the Professional Interview, the final stage of assessment if you are seeking to attain Chartered Membership.

Other than her active roles within CIAT, Kirsty has a wide range of working experience, from designing large scale engineering projects (oil and gas platforms) to residential projects. She is currently studying for a Masters degree in Interior Design. ■

> 'Kirsty was one of the first aspirATion Chairs, representing Scotland East and establishing an active networking group in Edinburgh'

aspirATion CHAIR

South East Region

Damian Bolton-Pryor

Architectural Technology is a passion of mine that has grown more and more throughout university and my career. This is why I've taken the opportunity to become an aspirATion Chair. I graduated from the University of Brighton in 2019, having completed the BSc (Hons) in Architectural Technology. Now, while working towards becoming a Chartered Member, I thought that this would be the perfect time to use my experience and relationships to help support other graduates and students in similar situations.

Representing the South East Region, I plan to become a familiar face within the industry and the local educational establishments, filling the bridge between the two. I feel that there are a lot of opportunities for employers taking on new talent.

I'm currently based in Portsmouth and work for a practice called HNW Architects. Working for an established practice like HNW, I feel supported in everything I do, both within and outside of work. HNW also have the same ethos in how they care about new talent and professional growth. This is why I feel that, by having a supportive employer, I can thrive in my role as aspirATion Chair.

Being a recent graduate, I also have a close connection with my university tutors and plan to develop a working relationship with Solent University in Southampton, with the help of the South East Regional Committee. Over time, I hope that my efforts in this role will encourage the next generation of AT professionals to progress within their careers. ■

> "Over time, I hope that my efforts in this role will encourage the next generation of AT professionals to progress within their careers"

> "aspirATion is a valuable resource for students, not just for support in their studies or progression in their career, but also for difficulties they may experience at university or the workplace"

aspirATion CHAIR

North West Region

Ray Ockenden MCIAT

Buildings and how they are built has always been a passion of mine. I spent my childhood exploring and examining different buildings, trying to work out how they were built and what was hiding behind the façade and interior walls. Before I started university, I didn't know anything about Architectural Technology or that such a career existed. Not knowing entirely what I wanted to do, I went to study HND in Sustainable Building Technology, where I got a Distinction. At the end of my HND, I was considering my options, architecture being one amongst them. I spoke to several architects, all of whom suggested AT to me instead of architecture, as they felt this path would be more suitable to my strengths and skills. I then secured a place at the University of Central Lancashire (UCLan) on the BSc (Hons) Architectural Technology programme.

Graduating in 2015 with First-Class Honours, I went on to Oxford University where I completed, with Merit, a postgraduate diploma in Historic Conservation. Since then, I've been in full-time employment. For the first year and a half, I worked for a small conservation practice dealing with historic, listed churches, private homes and barn conversions. During this time, I completed the Professional Assessment, becoming Chartered. I now work for Mott Macdonald, a multi-national, employee-owned management, engineering and development consultancy, where I specialise in the nuclear sector.

I became involved with CIAT while at UCLan, with the encouragement of the Programme Leader, Ann Vanner MCIAT, who is a huge advocate for the profession and Institute, as well as Paul Laycock MCIAT, Vice-President Education, who gave a talk on the benefits of membership. Upon graduating, I approached Central Office inquiring how to join the local aspirATion Group, as a way of furthering my involvement. I was advised that the North West aspirATion Group was not very active at the time and the Institute was looking for a new Chair. So, with an ambition to grow within CIAT and encouragement from my Programme Leader, I applied for the position and was successful!

Since taking on the role, I've worked to increase the presence of aspirATion within the North West Region, holding social and CPD events, some with other Institutes including RICS and CIOB. One of the most successful recurring events are the Professional Development Sessions, set up to assist graduates and students on their route from student to Associate member before finally becoming a Chartered Architectural Technologist.

Students entering the field of AT are the future of our profession, in which they need and deserve the support from the Institute and working professionals, to bring forward the next generation of skills and knowledge. aspirATion is a valuable resource for students, not just for support in their studies or progression in their career, but also for difficulties they may experience at university or in the workplace. We can be their voice. I have a close working relationship with the Regional Committee, allowing aspirATion to work closely and share good practice.

Looking to the future, I want to be able to show students and recent graduates the benefits of being part of the aspirATion initative. Not just for support and knowledge, but also for networking, building up their connection base and the career benefits it can bring. I hope to set up events for educational establishments to pass on the knowledge and tips I have learnt in my career whilst encouraging other professionals to become involved too. We are also planning to introduce an aspirATion Award in the future for three universities in the Region; UCLan, University of Salford and Liverpool John Moores. We hope this will help to promote and excite students about the AT Awards! ■

Life at Robert Gordon University (RGU)

Cameron Wood ACIAT

> "I can now see how much undertaking site visits during my time at RGU aided me in my understanding of the profession"

Cameron Wood, an Associate member, recently graduated from the BSc (Hons) Architectural Technology programme at RGU. Cameron tells us about his time as a student and how it's prepared him for working in industry.

I chose to take a year out from my studies before university to really figure out whether higher education was the right choice for me. Through hours and hours of research and visiting universities that offered an Architectural Technology programme, I came to the conclusion that Robert Gordon University was the best choice, for its positive reputation, great studio space that was on offer and the technology students were able to get their hands on to create both physical and virtual models.

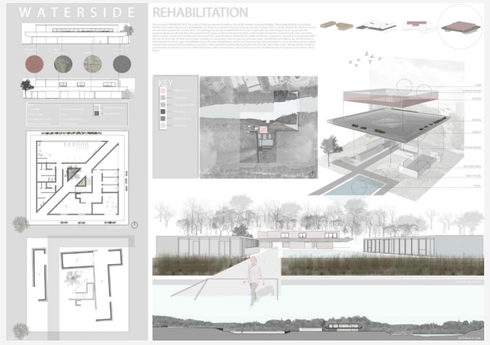
Once enrolled, we were taken on site visits that were project related, giving us a perspective the studio cannot always provide. It made the project seem real and not just a 'fictional' site so to speak, giving us a better understanding of how various aspects of buildings went together. During our Integrative Studies projects, whilst visiting live sites, we were able to take measured surveys to assist us in order to understand the environment and to help design a building structure that would be fit for purpose in that particular environment. Now that I have graduated and have moved on to work in the industry, I can see how much undertaking site visits during my time at university aided me in my understanding of the profession.

During my second year, we took part in an annual project where Architectural Technology students from universities in Europe came together to work on a given task. We were teamed up into groups with a student from each university and learnt different skills and software from each other while observing the other students' methods of learning and designing. Our group was chosen to visit the University of Alicante to present our project to the lecturers and students there.

I also chose to undertake simulated practice that took place at RGU two days a week. The rest of the week was treated as if we were in a 9-5 job. For example, drawings had to be ready for the following week to present, and to then receive feedback and guidance from our visiting lecturer, as well as a full-time practitioner. This gave me an entire run through of a project, from inception all the way through to its completion and handover to the client, providing a great portfolio for me to present to members of CIAT at the end of my third year. I believe this project also enabled me to secure a job in my fourth year, even before I had graduated.

I was also a Finalist for my report *Virtual Reality in the AT Curriculum* in the Student Award for Excellence in Architectural Technology | Report in the AT Awards 2019.

All in all, Aberdeen is a great city to study and live in and I'm looking forward to my career in Architectural Technology! ■



Cameron's design concepts for a rehabilitation centre

Catherine Stewart

> "The programme is challenging and allows for individual creation, innovative thinking and designing"

Catherine Stewart is a student member and after deciding to develop her skills within the built environment, she took the leap and applied to RGU.

As a 39-year-old with a diploma in Marketing and Management, I decided to develop talent and skills in the built environment sector and applied for the Construction Management programme at Robert Gordon University in Aberdeen. After working on several architectural projects, I decided that I preferred architectural design and structural engineering, so transferred on to the BSc (Hons) Architectural Technology programme to carry on my studies. I plan to continue on to the Masters degree programme afterwards.

This programme is challenging and allows for individual creation, innovative thinking and designing. The programme is delivered through lectures, practical case studies, studio projects as well as individual research and presentations. From the first architectural modules, I knew exactly what direction I should be going in.

Thanks to modules like Building Technology (1&2), Building Design. Building Surveying, Detailing & Specification and Integrative Studies, I learned how to, amongst other things:

1. Design a two-storey, timber frame construction house located in a Georgian conservation area in Edinburgh
2. Refurbish and adapt a 90-year-old granite house located on Belhelvie, Aberdeenshire
3. Fully detail a single-storey self-contained dwelling's side extension in Aberdeenshire. There were specific requirements for a roof extension and room layout and furnishings and I contributed to the specification of workmanship within the tender document.

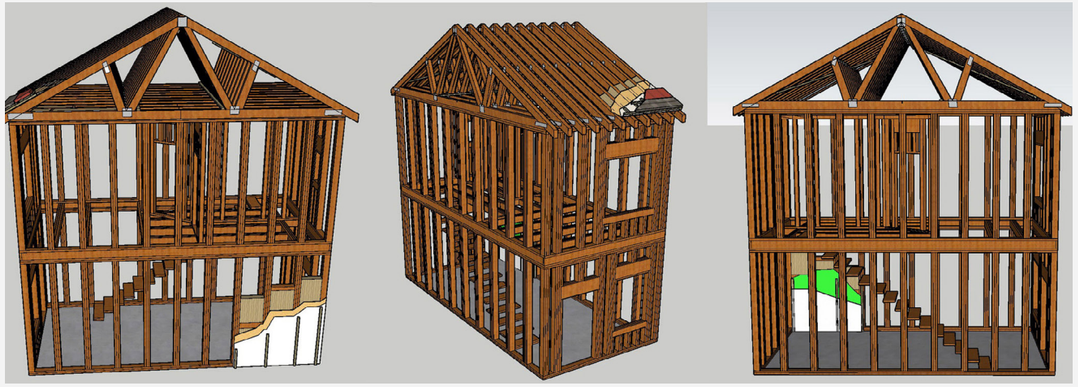
The Built Environment Communication and Scholarship Skills module enriched my work with the use of software and the latest technology for the built environment, such as AutoCAD, Sketchup, Revit and Photoshop. I have also been able to try Autodesk Robot Structural Analysis for professionals.

The land surveying module helped me to understand land layout, carry out practical surveying work in the field, use surveying instruments, document results and apply the right solutions of building structure options for particular land.

Site visits take place twice a year and I got the chance to observe real construction work on site and consult my own projects and designs with specialists (Architectural Technologists, architects and structural engineers). I was also able to visit a new residential area (two-storey houses and bungalows) in Aberdeen.

Studying gives me free access to many valuable sources for the construction sector such as Construction Information Service, Art and Architecture Source, Digimaps, iSurv and AJ Buildings Library. Free access to the student version of AutoCAD and Revit from Autodesk or directly from university resources is priceless.

I have just completed the first year of full-time studies with distinctions and as a joint winner of the Simpson Shield Technology Award. The ceremony took place on 8 October 2019 where I was able to showcase my work. Such a boost definitely encourages me to follow my chosen career in Architectural Technology. ■



Revit model of timber frame construction house in Edinburgh

Architects Benevolent Society (ABS)

Dedicated to helping the mental wellbeing of past, present and future members of the architectural profession.

Mental health affects everyone. More and more people are stepping forward with such conditions as it is more openly discussed and there is a much wider awareness of it. Within the profession, there is a culture of working long hours with pressing deadlines and this culture is taught from an undergraduate level. As a result, students are increasingly finding that the pressure can be too much at times.

The Architects' Benevolent Society (ABS) believes that a person's wellbeing should be looked after whilst studying. For anyone requiring support, therapy can be expensive and waiting lists can be long. As a result, the ABS has partnered with Anxiety UK to provide a student membership which could be available free of charge if you are studying Architectural Technology, architecture or landscape architecture within the UK.

Benefits for all students

- **Annual membership** of Anxiety UK (includes free subscription to **Headscape app**, access to reduced cost therapies and much more).
- Dedicated **email support.**
- Dedicated **phone helpline support.**

#AnxietyArch
www.absnet.org.uk

Ways to get involved

Become an Ambassador

The ABS has a regionally based Ambassador network. The ABS Ambassadors liaise with practices, professional membership organisations and schools of architecture to raise awareness, funds and support for the charity. With the help of the Regional aspirATion Groups, the ABS has been able to recruit volunteer ambassadors such as William Holland MCIAT, Rori Millar MCIAT, Oli Henshall MCIAT, Elouise Park MCIAT and many others to reach out to people who may be experiencing mental ill health, to let them know that they are not alone. If you would like to know more about how you could get involved too, you can contact the ambassadors above directly, for more information.

Host an awareness raising or fundraising event for us

There have also been various awareness and fundraising events happening across the UK to promote the #AnxietyArch campaign; some of which have been CIAT socials in aid of ABS, such as a cheese and wine evening in Belfast and the beer and burger evening in Cardiff.

Find out more

If you would like to join the #AnxietyArch campaign today or learn more about it or the work the charity does, please visit the ABS website absnet.org.uk

ARCHITECTS BENEVOLENT SOCIETY

AnxietyUK
Here for you since 1970

Anxious? Stressed?
We can help

Many people find their own ways to cope but some need support to manage these feelings and to get the balance right in their lives.

We can offer a variety of **mental health support** to **students** experiencing **anxiety**, **stress** or **anxiety-based depression**.

Our support is **free** and strictly **confidential**.
Through our partnership with Anxiety UK,
we can offer **quick access** to practical support.

Architects | AT Professionals | Landscape Architects | Assistants | **Students** | Families

#AnxietyArch @ArchBenSoc **www.absnet.org.uk**

FOR ASPIRING PROFESSIONALS

We are now accepting nominations for the John Newey Education Foundation

What is the John Newey Education Foundation?

The John Newey Education Foundation (JNEF) is designed to support students facing hardship which could affect their studies. There are two bursaries available from the fund each year, up to the value of £500. The funding can be used to support your studies, such as to purchase necessary books, equipment and materials or to contribute towards tuition fees.

Who is eligible?

Applicants must be members of CIAT (but not Chartered Members), registered on a CIAT Approved or Accredited programme and facing hardship.

How do you apply?

One submission per educational establishment is accepted. If you wish to be considered, you should speak to a member of academic staff. The programme tutor must provide a supporting testimony about your circumstances in the form of an electronic letter, which is to be endorsed by a signature from the Head of Department or equivalent, to CIAT.

The deadline for entries is Monday 11 November 2019

Visit ciat.org.uk/jnf.html

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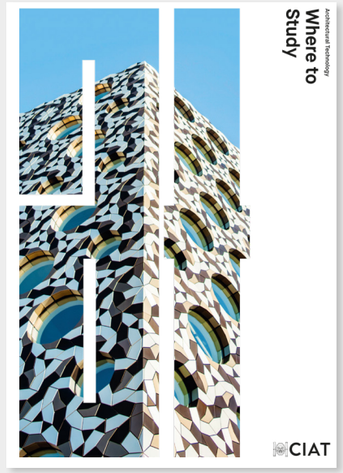
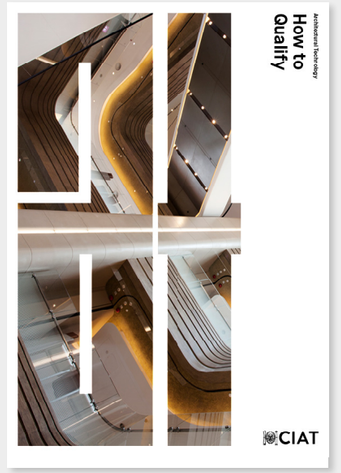
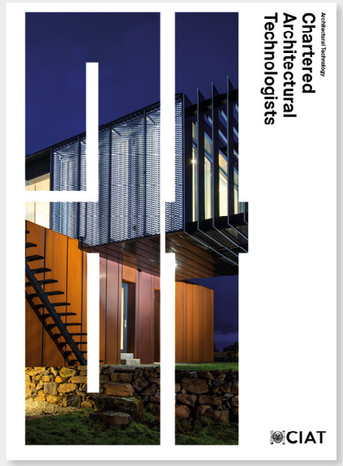
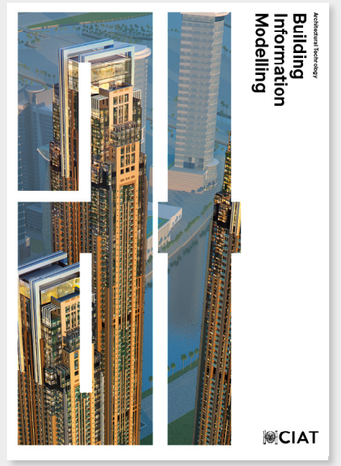
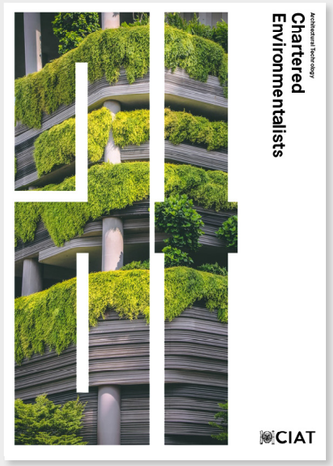










WorldSkills Kazan 2019

Luke O'Keefe and Ryan Dempsey tell us how they worked together to win Gold at the WorldSkills Competition 2019 in Kazan, Russia.

WorldSkills Kazan 2019, held from 22-27 August, was host to 1300 competitors from 63 WorldSkills member countries and regions.

There were 56 skill competitions across six skill sectors: construction and building technology; creative arts and fashion; information and communication technology, manufacturing and engineering technology, social and personal services and transportation and logistics.

The building information modelling category was in the Future Skills section of the competition. Future Skills was a specialised zone that showcased competitions in skills which were in demand in the era of high-tech production and digital economy.

The competition was held over three days and consisted of six modules:

- Module one – Understanding a BIM Execution Plan and Setting up of CDE
- Module two – Architectural Modelling
- Module three – Structural Modelling
- Module four – BIM Coordination
- Module five – Corrective Modelling
- Module six – Visualisation

Ryan Dempsey is from Dublin, Ireland and graduated from Dublin Institute of Technology (now known as Technological University Dublin) in 2018 with a BSc in Architectural Technology.

Luke is in his fourth and final year of the BSc (Hons) Architectural Technology and Building Information Modelling at Waterford Institute of Technology in the Republic of Ireland.

Our involvement with WorldSkills began In March 2019, where we competed in the National Ireland Skills Live competition and finished in the top three. This meant we were selected to go to Kazan, Russia in August.

Our preparations started in June, where we covered everything outlined in the technical description – a document that outlines the competition information, rules and marking scheme. We had a tremendous team around us, who we would like to take the opportunity to thank for their support, training and input. We had very insightful sessions with the Pacific Institute who really emphasised the importance of

self-belief and visualisation. By July, we really felt everything was coming together and we had a good chance of winning gold. Our intense preparation allowed us to go there with confidence, eliminating any nervousness that is expected in a competition of this calibre.

We planned all our tasks for the competition in advance, allowing us to hit the ground running when we actually got to see the project in Kazan.The project was to be delivered using a BIM execution plan and working from CAD drawings of the design that was to be developed into a 3D model fit for construction. The building was a hotel, which had some challenging areas, such as a complex swimming pool, feature staircase in the lobby and a facade that was modelled using adaptive components. The work was divided up: my (Ryan's) tasks included setting up the structural modelling, structural sheets and visualisations. On the final day, we coordinated the model against a supplied Mechanical, Electrical, Plumbing (MEP) model, which was used to clash against the architectural and structural models, and then resolving each clash and submitting a federated clash-free model to the judges.

> "We're extremely proud to have been part of such a special team, and being able to share this success is something the both of us will never forget"

We were granted an extra 30 minutes at the end of the last day, which we used to go above and beyond by doing an additional render, working harder like never before. It was an intense three days of tough competition, but we were delighted to see members of Team Ireland counting down the last few seconds and giving us a warm reception. As our competition ended a day before the rest of the team, it was great to go around and see everyone as they finished.

We both went in with a plan, stuck to it and came out on top. We knew we were well prepared, as we had spent the whole summer working non-stop, including many late nights. It was all worth it to hear our names being called out onto the podium and winning gold for Ireland! Both of us are extremely proud to have been part of such a special team, and being able to share the success is something we will never forget. The team received four gold medals, a bronze medal and seven medallions for excellence overall. The support from everyone, in the team and back home in Ireland, was unparalleled and it hasn't yet completely sunk in, even now, of what the whole team achieved in Kazan.

Luke and Ryan celebrate with Gordon Chisholm MCIAT, lecturer at WIT and World Skills Expert

To be the best in the world at what you do is an incredible feeling, and we can both say that we proved ourselves in Ireland first and now also on an international stage. It felt strange coming home and going from one extreme to another in a matter of days. We were so accustomed to coming home from work and training in the evenings, as well as weekends.

I (Ryan) have just started my MSc in Applied Building Information Modelling, so this is my next challenge. Personally, I want to build on this success and keep striving to reach new heights, to keep on learning about new processes and technologies that are ever-changing in this industry.

Even now, when I (Luke) look back at those experiences in Kazan, I still get goosebumps thinking about the entire experience and what we managed to achieve – it really is life changing. ■

From university to working life

Erin O'Kane ACIAT

Erin O'Kane is an Associate member and graduated last year from Ulster University. She tells us about her journey from student to BIM Consultant.

I completed my degree in Architecutural Technology and Management at Ulster University in 2018. The four-year programme involved various modules, from Building Information Modelling (BIM) to green design, including a sandwich year in industry. During my time at university, the aspect I felt I benefitted most from was the weekly talks delivered by industry professionals and specialists in their area of work. The Programme Team really encouraged me to research the aspects I found interesting, in order to enhance my knowledge in those areas. There were people on my programme who were incredibly talented when it came to 3D drawing and using software such as Revit, to create the most realistic visuals, but there were also so many other aspects to Architectural Technology that I didn't expect when I started. The variety within the modules allowed everyone to showcase their individual strengths throughout. As for me, I always wanted to push the boundaries a bit and see what other areas of the programme I could pursue.

During my placement year, I worked as a Contracts Design Technician for a company callled Specialist Joinery Group, in Northern Ireland. Throughout the year, I worked as part of a team on multi-million pound fit-out projects in London and Dublin. I had the opportunity to travel to London to meet with project architectural design teams to ensure that projects ran to schedule and were delivered to the highest standard. This academic year, in particular, I feel that students really get a taster for what life might be like once they graduate and pursue their first job. Working in a joinery company seemed like a risky option at the time, in order to aid my understanding before entering the final year. However, i felt like testing the boundaries might be a good thing in the long run. I was lucky enough to be the recipient of the Hays Placement Prize, recognising my technical understanding, professionalism, work ethic and personable manner during my period of professional practice.

During my final year, I tried my best to set myself up for success when I graduated. 'Easy' would never be a word I would use to describe it. However, between the Programme Team at Ulster University, resources, and support throughout the year, I must say it made it a lot less daunting. An interest of mine that became apparent during my final year was BIM, and I decided it would be the topic I would focus on for my dissertation. Stemming from this, I was lucky enough to be selected as one of six Finalists in the Student Award for Excellence in Architectural Technology | Report category at the AT Awards 2018. I received the Commended Award for my undergraduate dissertation entitled *Mind the (Performance) Gap*. My paper then went on to be published for the 2018 International Congress on Architectural Technology (ICAT), where I also presented.

The report's topic was recognised within the university and received internal funding from the Research Challenge Fund. Prior to graduation, I was employed as a Research Assistant at the University and I played a key role in furthering the work they were embarking on. The role allowed me to undertake pioneering research into the potential for existing technologies to be linked to the BIM process, for the purposes of verification of building details. As the principal researcher, I took the lead in liaising with leading companies and professionals involved in BIM and digital delivery. I travelled to, and worked with, academics at the University of Glasgow, University of Strathclyde and University of British Colombia, to investigate the potential for specialist imaging technology to link to the BIM process. During this time, I also completed courses with BRE Academy, focusing on BIM , including BIM Level 2 for Information Managers.

Erin (second from right) at AECOM'S offices in Burnaby, Vancouver with members of their team, who she presented her research to

One of the companies I had the chance to pitch the research to was AECOM, whose global projects I was familiar with and had a keen interest in. Due to the area of research, i wanted to pursue a job role that was primarily BIM focused. I applied for the role of Graduate BIM Consultant at AECOM and was over the moon when I was offered the position.

Since joining AECOM in April 2019, I've been exposed to amazing opportunities to implement digital innovation projects of all sizes throughout Europe, the Middle East and Africa. No two days are the same and as the DPD (Digital Project Delivery) team, we work collaboratively with project teams from all professions. We drive the underlying technology, freeing them up to focus on solving clients' problems. Key aspects of the role include planning and mobilising projects digitally, implementing standards and digital foundations of the way our teams work, implementing validation and checking process for technical excellence, knowledge sharing through digital communities and AECOM toolsets, as well as upskilling staff in the latest digital tools.

> "Since joining AECOM, I've been exposed to amazing opportunities – no two days are the same!"

The DPD team is made up of leading industry digital experts and working with them is brilliant – I learn something new everyday!
The opportunities I'm being afforded at AECOM are endless. I can challenge and develop my knowledge and skillset by being involved in large scale projects at all levels. Promoting best practice to improve quality, efficiency and lower overall cost are key for the successful digital delivery of projects.

Digital tools and processes are constantly evolving. Being part of a team in a company at the forefront of developing new approaches to future infrastructure is incredible, not only for me but for any young professional today. ■

© Watson Joseph

My study and placement experience

Watson Joseph

Watson Joseph is a student member and in his final year on the BSc (Hons) Architectural Technology programme at Leeds Beckett University.

I moved to the UK from the Turks and Caicos Islands, inspired to study Architectural Technology after seeing structural failures in the Caribbean, caused by natural disasters and shortfalls in planning and design.

I've always had a fascination for buildings, their design and how they are constructed. I remember watching a very intriguing documentary on the Aldar Headquarters in Al Raha, Dubai and the La Sagrada Familia in Spain. I was captivated by the structures; the extent of human imagination and engineering was unimaginable. It was amazing to see how an architectural structure could transform a landscape into nothing short of a magnificient work of art.

Through university open days and online research, I decided to enrol on the Architectural Technology programme at Leeds Beckett University. Leeds Beckett has been a brilliant place to study; it offers an excellent Architectural Technology programme with modern equipment that connects you to the reality of how buildings are designed, detailed and planned. Coming from a different cultural background, I was exposed to world-class tutors, teaching facilities and a diverse student community, which makes my programme and time here a once in a lifetime experience.

During my second year, we were introduced to various modules such as interdisciplinary projects, which gave us an idea of what life in industry would be like, working alongside different professionals such as quantity surveyors and structural engineers. This was an excellent module for aspiring professionals, providing an understanding on how to work with other professionals on the design team to meet a common goal, which is vital to every project. We were also introduced to Building Information Modelling (BIM). I was able to produce drawings that meet the standards of industry.

All these modules have aided me in developing my skills, critical thinking and producing drawings,

> "Coming from a different cultural background, I was exposed to world-class tutors and facilities, which make my time here a once in a lifetime experience"

which led me to become a Finalist for the 2018 Student Award for Excellence in Architectural Technology | Project in the AT Awards. The project design was inspired by the Roman Amphitheatre. It drove me to incorporate the idea of a semi-circle roofless theatre into a marvellous, sustainable structure that will meet human development goals, while at the same time sustaining the ability of natural systems to provide the natural resources and services upon which the economy and society depend. The structure was designed as a flagship building of architectural merit and will act as a catalyst for future thoughtful development within the vicinity, an act of place-making in keeping with the green aspirations of the client it was built for.

The programme at Leeds Beckett also offers the opportunity of a placement year, which I highly recommend for all students. I had the chance to undertake a placement in one of the most recognised and award-winning architectural practices, P+HS Architects. My time there was informative and educational, working and learning alongside some of the brightest and experienced minds in industry, giving me the confidence to improve my approach and delivery of designs. I worked on varied schemes such as refurbishment, healthcare and residential. One of my favourite projects was 267 residential dwellings in West Hebburn, Newcastle. With the site being a brownfield site, it presented a lot of challenges which helped me to develop a stronger approach to design and critical thinking.

Leeds is an inspiring city to study in. During my first two years, I was taught how to develop objects and drawings in 2D and 3D, using both free hand and software modelling systems. I also learnt to use modern technology used by designers to produce work at an advanced and technical pace. During those years, I developed a deeper love for the discipline and my interest grew in how to take a simple idea and develop it into a creation which can transform conceptions of buildings today and in the future.

The city is also a phenomenal place to live. What interests me most is that it has a mixture of historic and modern landmark buildings that complement each other in a way that excites young designers. From the historic Leeds Town Hall to the iconic Bridgewater Place and the Broadcasting Tower, the city leaves nothing to the imagination when it comes to inspiring young professionals in the built environment sector. One of my favourite buildings to visit in Leeds is the historic Kirkgate Market, located in the heart of the city centre. The design acts as a catalyst for future architecture within the region. The entrance is very aesthetically pleasing and attracts tourists from all over Europe.

Kirkgate Market, Leeds

Overall, my academic and work experience here in the UK has been nothing short of magnificent. I believe that with the programme structure, tutors and faculty, as well as my desire to learn, I'll gain the knowledge necessary to take not only the Turks & Caicos Islands, but many others affected by climate change and overpopulated urban cities, into the 22nd century. ■

What happens after university?

Have you finished college or university? If so, it is time to upgrade your membership to Associate, ACIAT or profile candidate.

What level of membership is right for me?

Associate member, ACIAT:

If you hold a recognised qualification within the built environment and are an employee or unemployed, then you can upgrade to Associate, ACIAT.

Profile candidate:

If you do not hold a formal or recognised qualification or you are self-employed as a sole practitioner, principal, partner, director, freelancing, offering/providing services directly to clients (paid or unpaid), even to friends or family, then you can register as a profile candidate.

Please note the Institute is currently undertaking a Membership Grade Review and there is a proposal to replace profile candidate with Affiliate status from 1 May 2020 subject to final approvals. Please see page 32 for more information.

If you are uncertain of your professional qualification path, then you can contact the Membership Department, who will be pleased to help you, on 020 7278 2206 or email membership@ciat.org.uk

Online joining codes

SA19 – £70 for Associate applications

SP19 – £70 for profile candidate applications

How do I upgrade?

The easiest way to upgrade is online. Take advantage of a promotional offer to upgrade at a reduced fee of £70, which is available if you have recently graduated. You will need to complete an online application at ciat.org.uk/membership/join.html and provide an up to date CV and proof of qualification/s.

The earlier you upgrade, the more you wil benefit and save, as the reduced fee only covers the period up to 30 April 2020.

What next?

To qualify as a Chartered Architectural Technologist, MCIAT, there are two progression routes:

- The Professional Assessment (PA)
- The Professional and Occupational Performance (POP) Record

The POP Record is suitable for individuals who don't have much experience in the industry, for example, recent graduates. It is designed in the form of a work based diary, which would guide a candidate to the type of experience they need to gain.

The PA is for more experienced candidates or those with a specialism. It is a holistic self-assessment over three stages of educational, practice and professional standards.

You can find much more information on our website at ciat.org.uk/membership/progressing-your-membership.html ■

CPD

Learning doesn't stop when you've completed your studies. Find out more about how you can continue your professional development.

Within the Institute's *Code of Conduct* it states that "members (excluding student members) shall keep themselves informed of current practices and developments appropriate to the type and level of their responsibilities, and be able to provide evidence that they have complied with the requirements for continuing professional development (CPD) as published by the Institute from time to time."

Find out more about CPD at ciat.org.uk/education/cpd.html.

Practising members are recommended to develop a yearly Personal Development Plan (PDP) to identify CPD activities. Some examples of CPD can be:

- Reading of books and periodicals
- Use of distance learning text, podcasts and online resources
- Reading and writing articles/technical papers
- Private study or studies leading to a further qualification/ academic award
- On the job research
- Tutoring
- Seminars and courses
- CPD events organised by CIAT, CPD providers or other organisations
- Conferences

CPD demonstrates to clients, colleagues and the public the commitment of practising members to be well informed and up to date in their areas of expertise.

To support its members, the Institute offers an online platform to find relevant courses to support professional development. The AT CPD Register is an online directory of providers and their courses which have been assessed relevant to Architectural Technology professionals. You can find courses on CDM, BIM, building regulations, fire and much more. ■

Visit ciat.org.uk/education/cpd/cpd-register.html

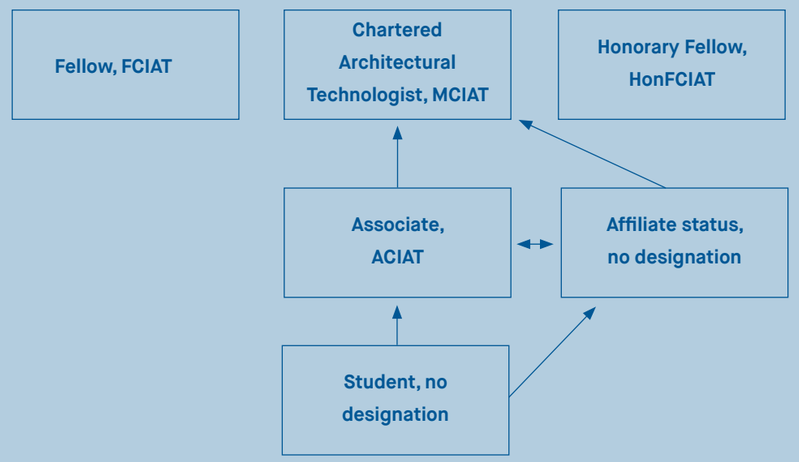
Membership Grade Review

Over the last 18 months, your Institute undertook a holistic review of the membership grades, structure and qualifying mechanisms in line with the CIAT Strategic Plan and Objectives. To ensure that the process was rigorous, robust and evidenced based, all stages of this review were considered, debated and approved by Executive Board and Council.

Final approvals stage: AGM 2019

The Review outcomes are in the form of Resolutions for consideration and approval at the AGM in Glasgow on 9 November 2019. The AGM delegation is made up of Voting Delegates from Regions and Centres who will be voting on your behalf. Each of the Membership Grade Review related Resolutions requires a two-thirds majority vote for it to be successful.

The proposed structure:



Key information

The following information accompanying the Resolutions is to help assist your understanding of the changes and how this may affect your membership.

There are no changes to:

- **Student member**
- **Associate member**
- **Chartered Architectural Technologist, MCIAT**

How will the proposed changes affect me as a member?

Student member

There will be no change to student membership, and after satisfying the academic criteria, you should initially upgrade to Associate membership and plan how to progress to Chartered Architectural Technologist, MCIAT status.

Associate member, ACIAT

There will be no change to your Associate, ACIAT membership. You are encouraged to progress to Chartered Architectural Technologist MCIAT status.

Chartered Member, MCIAT

There will be no change to the Chartered Architectural Technologist, MCIAT qualification. However, there will be the opportunity to apply for the Fellow class subject to meeting the eligibility criteria and standards.

Chartered Architectural Technologist will remain the highest level of professional qualification and maintains the recognition and status in practise.

What are the proposed changes to the membership structure?

The Membership Grade Review propositions, as presented, are:

1. **phasing out of Technician, TCIAT;**
2. **phasing out of profile candidate and amalgamating into Affiliate status;**
3. **introduction of Affiliate status;**
4. **introduction of a Fellow class, FCIAT;**
5. **introduction of an Honorary Fellow class, Hon FCIAT; and**
6. **closing of the Honorary member class, in favour of Honorary Fellow class.**

1. Technician member

Subject to the necessary post AGM approvals, the transitional two-year phase out timeline for Technician (as approved by Executive Board) will begin in December 2019.

At the end of the two-year transition, Technician membership and use of the TCIAT post nominal designation will cease.

2. Profile candidate

Profile candidate will be withdrawn and replaced by the Affiliate status.

Subject to AGM and Privy Council approvals, it is planned for the transition to take effect on 1 May 2020.

3. Affiliate status

There will be two types of Affiliate status for individuals.

Affiliate A:
Architectural Technology professionals who:

- do not satisfy the academic standard criteria for membership; or
- are offering services directly to clients via self-employment (as defined in the Code of Conduct).

Affiliate B:
Individuals: For those with an interest in Architectural Technology and/or built environment sector and wish to be associated with CIAT and support the discipline.

Group or Body Corporates: For those with an interest in Architectural Technology and/or built environment sector and wish to support and be associated with the discipline of Architectural Technology and CIAT.

Is Affiliate status a grade of membership?

No, it is not a membership grade but a status within the membership structure. It facilitates access to qualifying and an opportunity to be engaged and involved with the Institute.

Affiliates will be able to:

- refer to themselves as an 'Affiliate of CIAT'; and
- promote their relationship with the Institute via a distinct CIAT Affiliate logo (if introduced by Executive Board and issued under license).

When will this be launched?

Subject to the necessary post AGM approvals, the intention is that Affiliate A will be launched from 1 May 2020 and the Affiliate B launched later in 2020 or from 1 January 2021.

4. Fellow Member, FCIAT

This is a new class of membership which Chartered Architectural Technologists, MCIAT can apply for as an additional qualification.

What is a Fellow Member?

Fellow Member and the use of the post nominal letters, FCIAT enables additional recognition for Chartered Architectural Technologists. It is awarded for excellence and/or for significant contribution to the advancement of the discipline, profession or practice of Architectural Technology.

This class complements the Chartered Architectural Technologist qualification and is an aspirational achievement for such Members to further demonstrate their skills, roles and functions.

Who can apply?

Chartered Architectural Technologists.

When will this be launched?

Subject to the necessary post AGM approvals from The Privy Council, the intention is for it to be launched from 1 May 2020.

5. Honorary Fellow, HonFCIAT

This will be awarded to a distinguished individual:

- with pre-eminence in their field;
- for significant contribution to the profession; or
- with a significant and ongoing relationship with the profession.

Who can apply?

It is by invitation only and cannot be applied for. Individuals will be nominated and assessed.

When will this be Introduced?

Subject to the necessary post AGM approvals from The Privy Council, the intention is for it to be launched from 1 May 2020.

6. Honorary member, HonMCIAT

The Institute is privileged to have 12 Honorary members. Following the AGM, all Honorary members will be written to, confirming that their status has been unaffected and that they remain Honorary members.

What happens post the AGM?

As CIAT is Incorporated by Royal Charter, any Resolutions that change the Charter and Bye-laws must be approved by The Privy Council, who regulate all Chartered Bodies. The Institute has been working with The Privy Council in readiness for these proposed changes. As post AGM processes and approvals are required, any changes within the Charter and Bye-laws cannot become effective until the approvals from The Privy Council have been received. There is a transitional timetable for the implementation of the modifications, subject to change due to The Privy Council processes. ■

AT Journal issue 130

For additional background and information, please read the Membership Grade Review article from the summer issue.

Guide to: writing your CV

Words by Hays

When you are looking for your next job, your CV is the first impression an employer will have. You need to make sure you stand out and showcase your skills and professionalism. Follow this guidance to make sure yours is the best it can be.

Presentation and layout

Your CV must look clean and well structured, with enough white space to enhance readability. It should be no more than two pages long, unless you are including project details. Use a simple font like Arial, 10-12pt, and keep formatting, such as italics and underlining, to a minimum.

Bullet points are extremely useful as they allow you to highlight key points succintly and keep the document looking tidy.

Try to start each one with an action verb if you can ('created', 'managed', 'increased', 'improved') rather than overusing 'I'.

Spelling and punctuation must be perfect, so after you proofread and spell-check, give it to a friend to do the same. Employers are inundated with many applications and unnecessary mistakes can mean yours end up in the reject pile.

Basic CV structure

Name, address and contact details
Be sure to use the phone number and email address that you most often utilise so that you can reply to potential employers in a timely manner. There is no need to include details such as date of birth, gender or marital status.

Personal summary
This is optional, but it's a good opportunity to highlight in a few sentences what you hope to achieve in your next position and what you feel you can uniquely offer the employer. Tailor this section to each job position you are applying to.

Skills summary
Including a skills summary can capture the employer's attention by making it immediately clear what you can offer. Compile a brief bulleted list of any skills and experience which are relevant to the role. Wherever possible, use the same adjectives as those used in the job advertisement.

For instance, if the ad specifies someone who has 'effective administrative abilities and excellent interpersonal skills', these should be addressed under your skills section with brief evidence as to where you gained those skills. Make sure to always tailor your skills and expertise to the individual position you are applying for, rather than sending the same CV to all the jobs you apply for.

Relevant experience
This is your work history and includes paid work and any relevant volunteer or work experience placements. Work backwards from your most recent job and don't leave any gaps; you don't want to give potential employers any cause for concern. If you took a year out, carried out an interim assignment or travelled for six months, say so, and focus on the fact that it gave you some excellent skills and experiences.

Achievements
A future employer will be interested in occasions where you went above and beyond your duty and achieved something great. So, if you have been 'employee of the month' for three months running, say so. All achievements should be quantified.

Education and training
Use your common sense here. If you have an advanced degree, few people are going to be concerned about the exams you took when you were 16. Also include any training courses you have completed that are relevant to the job position.

Interests
These are optional, but should you choose to include a section, keep it brief. Avoid saying anything contentious, and wherever possible, use the space to show how your personality is suited to that of the business you're applying for.

References
Actual references are rarely included and it is usually fine to simply say 'references are available on request'. The employer will then make later arrangements to contact the referees.

Look for key words and phrases

The best place to start the CV tailoring process is to go through the job description, highlighting the key words and phrases. List these on a separate piece of paper, grouping them into the following categories: soft skills, technical abilities and job experience.This will make it easier to incorporate the key words and phrases into the relevant sections of your core CV; the personal statement, skills and employment history respectively.

Tweak your personal statement

You should tailor your personal statement and explain to the reader why you are keen to work not just in this specific industry, but with this particular company. Make sure that your personal statement mirrors the qualities, character and experience specified by the job description, and try to fit the tone of your statement to the style of the job description.

This will grab the recruiter's attention and pitch you as the perfect fit for the job.

Go over your educational and work history

Finally, take some additional time to polish your education and work history. It is important not to embroider the truth, so everything in your employment history must be true, but you should adapt it by making sure that you highlight those duties and achievements that are also mentioned in the job description. This will further underline how well suited you are to the role. ■

What could you be earning?

Words by Dorota Fitzpatrick, Assistant Membership Director

Featured in *AT Journal* and *AT Weekly*, here is a summary of the results of the Salary Survey, which CIAT undertook in 2018.

The Survey findings should give you a better idea of the salaries that you could be expecting to earn once you qualify or are already working as a Chartered Architectural Technologist, MCIAT.

The Architectural Technology discipline has been steadily growing and evolving over the past few decades and is fast becoming a very much sought-after profession in the built environment sector. As a Chartered Architectural Technologist, MCIAT, you will be qualified and recognised to lead on projects from conception through to completion and your skills will bring a unique and invaluable skill set to each project.

You should be able to demand a salary which is in line with your skills and on a par with other fully qualified professionals within the built environment sector. ■

Salary Survey 2019

Find the full article in AT Journal issue 130

In 2018, CIAT undertook a salary survey of its UK based members with a positive response rate of 23%.

The key objectives of the survey were to:

- support members to benchmark their remuneration accordingly by their employers and map career development path to higher earnings;
- improve our ability to inform and report to current and future Architectural Technology professionals of their potential earning capability;
- inspire members to progress within CIAT and its membership structure;
- utilise data for promotion via all relevant mediums on the profession and demand from industry for our members; and
- external promotion campaigns and purposes.

Demand

The need and demand for the Architectural Technology discipline and professionals maintains its continued growth nationally and internationally, with Chartered Architectural Technologists enjoying near full employment.

Over 91% of respondents across all grades are in full time employment and 75% of Chartered and Associate members work within the Architectural Technology/architectural practice sector

Challenges

However, there are challenges ahead. There is concern in the built environment sector surrounding the impact of the Brexit impasse and the ongoing skills shortage in the sector, which will worsen if skilled EU citizens face greater barriers to working in the UK.

Academia and industry face the challenge of addressing the industry's skills gap and must collaborate more closely in order to respond to the needs of the sector and society. As an Institute, we continue to endorse and promote inclusive and accessible routes to a rewarding career within the discipline, which include the Government's Trailblazer apprenticeship scheme.

As well as tackling the skill shortage, a change in culture within the sector is needed immediately – complacency must become unacceptable and people should be aware that events similar to the Grenfell tragedy are still possible. The long-term and significant implications to the industry following the publication of the Independent Review of the Building Regulations and Fire Safety will affect the whole industry, and CIAT is actively involved as one of the lead professional bodies within the Review.

Similarly, CIAT has had significant input into the Cole Report (Scotland) following the construction failures at a number of schools in Scotland. Both tragic events highlight the critical need for holistic and collaborative working in our sector.

Future

Looking ahead, Architectural Technology professionals should continue to enjoy the high rates of employment, diverse global opportunities and rewarding careers. Architectural Technology professionals bring a unique and invaluable set of knowledge, competence, experience and professionalism to each project and should quite rightly be able to demand a remuneration which is in line with their professional peers based on the expertise they bring to the project.

Trends and opportunities

Two emerging job roles for Architectural Technologists with a healthy remuneration package were:

- Design Manager
- BIM Manager/Co-ordinator

The majority of Associate members and profile candidates agreed that qualifying with CIAT would help raise their profile and have a positive impact on their future earning capacity and current remuneration.
25% of surveyed employers reported finding AT/CIAT qualified staff was fairly easy. This is supported further by the Institute's job board, AT|jobs. ■

Average (mean) UK salaries

£45,462
Chartered Architectural Technologists

£39,285
Professionally Qualified Architectural Technicians

£33,286
Associate members

£30k–£50k
Earnings for the majority of Chartered Members

£35k–£40k
The modal UK salary in 2018

The top three functions/project types delivered by respondents' organisations were:

- New build
- Residential
- Commercial

Top three specialisms were:

- Principal Designer/CDM
- Building Information Modelling (BIM)
- Conservation

Apprenticeships

Apprenticeships are becoming more popular with students to avoid potential debt and a “structured” education system that comes with full-time university education. Architectural Technology is a relatively new face to the apprenticeship scene, but it’s one of the best examples of how industry work encourages faster and more in-depth learning than traditional teaching methods.

CIAT supports different routes to a rewarding career in Architectural Technology. An apprenticeship is a route into a profession which provides individuals the opportunity to combine working in a relevant field whilst studying for a formal qualification.

Due to the vocational nature of the built environment and the Architectural Technology profession, apprenticeships are a valuable way of gaining relevant work experience as well as the necessary underpinning knowledge to become a valued, competent professional.

To date, CIAT has formally supported the Digital Engineering Technician Level 3 Higher apprenticeship and the newly approved Construction Design and Build Technician Level 4 apprenticeship, which are part of the Government’s Trailblazer apprenticeships scheme; others are also available.

For more information, please vist ciat.org.uk or the Institute for Apprenticeships and Technical Education’s website. ■

Lily Smith

Lily Smith, a student member, tells *aspirATion magazine* about her Higher Apprenticeship in Construction Management.

Having always been interested in doing an architectural based qualification, I found a local company where I could do a work placement in order to ensure that going to university to study architecture would be the right thing for me to do. I was surprised to find out that the office I would be working in had no architects at all; this is where I found out about Architectural Technology!

Before working with this practice, I hadn’t heard anything about Technologists or how the job role differed to that of an architect. The application of detailing, materials and technology to building design appealed to me much more

than just the design aspect. Being able to execute the design concepts that I produce would create a greater feeling of satisfaction for me.

Having completed my work experience placement, I was offered an apprenticeship by the company. My apprenticeship is being completed at the University of Wolverhampton, where I attend classes one day a week throughout the academic year. The other four days of the week, I work full time for the architectural practice. Within a 37 ½ hour weekly contract, I must achieve a 20% off the job qualification; this 20% is described as any work, related to the industry that isn’t part of my daily desk duties, for example: site visits; meetings; CPDs; university and seminars. I believe full-time work combined with off the job training allows for the highest chance of success within the qualification. The knowledge that I have gained through office hours is invaluable.

> The experience on my CV will help me to stand out against other candidates

The offer of the apprenticeship appealed to me because of the faster progression within the industry; upon the completion of my foundation degree, I will already have two years’ experience in the industry. This will then be extended to three years of experience after achieving the full honours degree. This early benefit of experience will set me apart from fellow full-time students my age; the experience on my CV will help me stand out against other candidates applying for a post graduate job and will also help me climb my career ladder much earlier than usually achieved. This progression is mainly due to the industry experience gained by employment; the experience comes in the form of real project work and collaborative work with qualified Architectural Technology professionals.

Being in a working environment with colleagues that have decades of experience develops my understanding and knowledge more than any other aspect of my programme. This is one crucial element that comes with an apprenticeship – the amount of intelligence shared by the other staff in the office is invaluable. There is also the financial benefit - apprenticeship schemes are funded and there is no cost for the apprentice. Apprentices earn a salary without detriment to their studies. Working while at university can often be difficult if the job is part time and has no relevance to the subject being studied. The full-time employment attracted me because I’m quite a driven and motivated person. Having contracted hours means I’m prompted to work and study more than I would have done otherwise. It can also be attractive to those students who would prefer to live at home during their time of study.

Furthermore, a key benefit also comes from the application of university studies to real projects. From completing my first year of the programme, I can confidently say that working on authentic projects puts that extra bit of pressure on the quality of work. Assignments at university are not realised and therefore a few mistakes will only affect the grade at the end of the term; working on a project that will be realised means that any mistakes can have serious repercussions. This added responsibility ensures that the work is completed to the highest standard possible. ■

© Harrison Baker

Harrison Baker

Harrison Baker is a student member and studied an NVQ in Construction in the Built Environment at Dudley College. Harrison is employed as an apprentice at Glenn Howells Architects in Birmingham and is about to begin a Higher National Certificate (HNC) in Construction at Birmingham City University.

Being an apprentice allows me to immediately apply the topics I learn in college to what I do in the workplace – allowing me to see the Architectural Technology process in the real world. I really enjoy being in the workplace – I'm surrounded by like-minded and knowledgeable people that not only have passion for architecture, but the drive to deliver award winning projects and working as a team. In addition, they are helping me to succeed alongside them – which is a great environment to learn and develop in.

My experience as part of a bricklaying team ignited my interest in the built environment sector. I realised that an apprenticeship would be the best option for me because I enjoyed being in a workplace environment and I knew I wanted to achieve a recognised qualification. I had an interview with my now-boss Afsar, who is the Technical Director at Glenn Howells Architects, and then I started my apprenticeship in January 2018. Afsar told me that he remembers that it was my enthusiasm for not just the job, but also towards learning that made him want to offer me the role, and I'm thankful to him.

I spent four days a week working alongside architectural technology professionals in Glenn Howells Architects' Birmingham office, and then on Mondays I attended Dudley College. The College was really well-equipped and the tutors made it a great place to learn and progress.

On a daily basis I draw and review information, upload documents and issue new drawings to the wider design team and subcontractors. I've recently been working on a large housing scheme in London called Deanston Wharf, comprising almost 800 apartments of various sizes and typologies over ten blocks. The project is due to start on site in early 2020 and should complete by 2024. The ten buildings will bring life to what was once a WWII bomb site by the Thames and will provide a significant amount of private and affordable housing. My role is setting up the general arrangement plans, elevations and sections for the project and we have recently agreed final apartment layouts.

My roles and responsibilities are developing all the time as my learning is progressing, and I'm looking forward to taking more on and deepening my knowledge. Glenn Howells Architects, as a practice, has supported me massively with courses and my education.

> "What I benefit from the most is being in the office, taking part in projects and learning from my colleagues – the wealth of knowledge is second to none"

Concepts for housing scheme, Deanston Wharf
Harrison Baker

However, what I benefit from most is being in the office, taking part in projects and learning from my colleagues – the Architectural Technologists, architects and support staff. I feel the wealth of knowledge here is second to none and it's great the way that this gets shared with junior staff, such as myself.

It's not just work-based knowledge and skills that I'm learning, but also how to work with others, general workplace behaviour and expectations, and how to be a well-rounded employee.

I'm looking forward to the future. It can sometimes be hard work, but the satisfaction far outweighs that. Once I've completed my HNC, I would like to progress onto a degree-level apprenticeship, which is really exciting. There are many avenues I can take moving forward in my career, all thanks to Glenn Howells Architects who have given me an opportunity that only comes once in a blue moon. Within the practice, it seems there are no limits. My goal is to reach them and go beyond, to push myself as much as I can to achieve the best I can in my career, and support the needs of the practice, the projects and fellow colleagues alike. ■

Architectural Technology at Edinburgh Napier University

Dr Suha Jaradat ACIAT
Programme Leader
BSc (Hons) Architectural Technology

This has been my first year as a Programme Leader for the Architectural Technology programme in the Department of Construction and Surveying, School of Engineering and the Built Environment at Edinburgh Napier University. It has been an exciting and successful year, with plenty of activities and events which included the following:

Site visits in 2018-19

Riverside Museum by Zaha Hadid Architects in Glasgow, Scotland
Final year students visited this multi-award winning transport museum, which is one of the most popular attractions in Scotland. Riverside Museum is a hyper-modern museum with over 3000 collections of historic vehicles and state-of-the-art interactive displays. This visit inspired the students to work on the final year design project to create a modern art centre in Glasgow.

V&A Design Museum in Dundee, Scotland
The final year Architectural Technology students were amongst the first visitors to the new Victoria and Albert (V&A) Design Museum in Dundee, the first V&A Museum outside London and the first design museum in Scotland. This is an international centre of design that presents the best of Scottish creativity as well as the best of design from around the world. The V&A Dundee opened on 15 September 2018 and was created by renowned architect Kengo Kuma.

International study trip to Berlin

Third year students spent three days in Berlin, along with students from Construction Project Management, Building Surveying and Quantity Surveying programmes as part of their study trip. The trip included a guided tour of the Reichstag, Museum Island and significant historic and infrastructure buildings in Berlin, on the first day. The second day focused on contemporary architecture. We started with a visit to the German Historic Museum followed by a walking tour to the embassy district. The trip was concluded on the final day with a guided tour of the spectacular Olympiastadion, Corbusierhaus, Philharmoniker and Neues Museum.

International placement in Germany

An opportunity came up for one of our third year students for a summer placement in Germany via an AT graduate who now works for M&P Group, one of the most innovative technical corporate consulting firms in the country. They said of their experience:

"My internship with M&P has given me practical experience of many typical building services tasks such as equipment sizing and load analysis, all the while using industry standard software.
M&P have been working in a 3D BIM environment since the mid 2000's and interacting with the day to day of such an environment and its associated tools/software has been a semester of learning in and of itself. In fitting with M&P's commitment to modern practices I was tasked and supported with the development of a parametric pipe layout generator built with Python and Revit scripting tools. The skills and knowledge I have gained here apply as equally to Architectural Technology as they do to building services."

Articulation Agreement with Ayrshire College

An articulation agreement has been signed with Ayrshire College to ease the transition of direct entry students and improve their achievement at University. This covers articulation from HNC Architectural Technology to BSc (Hons) Architectural Technology at Edinburgh Napier University. A college transition video was also created and is now live on the University website. A new college outreach initiative (Let's start 2019) took place in June 2019 in which we delivered talks and tours to college students at Edinburgh Napier University and arranged for students to talk to them about their transition experience.

PhD completion

One of our PhD students, Lara Al Shawawreh, successfully defended her PhD research entitled Architecture of Emergencies in the Middle East: Proposed Shelter Design. Dr Lara Al Shawawreh was awarded the degree at the graduation ceremony in July. Her work was supervised by Professor Sean Smith and John Wood. The External Examiner was Professor Peter Guthrie, from the University of Cambridge, and the Internal Examiner was Dr Suha Jaradat.

Graduation stories: Twins graduate with Class Medals

We had an unusual situation this year on the Architectural Technology programme. The top two graduating students are identical twins, and their award marks are almost identical as well.

The 21-year-olds, Isla and Chloe Roxburgh, from Dunfermline, student members, graduated from Edinburgh Napier and they were both awarded a Class Medal for their exceptional academic achievement.

Aishwarya, Aarathi and Pooja at the Multi Comfort Student Contest

Studying in Dubai: Manipal Academy of Higher Education

The Bachelor of Architecture (B.Arch) programme at Manipal Academy of Higher Education, Dubai became the first CIAT Accredited Programme in the UAE. Learn what they have been up to.

Success on the international stage

The students of architecture participated in the Multi Comfort Student Contest 2019. The first and second place prizes were awarded to third year B.Arch students at National Stage. Aishwarya Premjith, Aarathi Raathesh and Pooja Anand participated on the International Stage in Milan, Italy, held in June 2019. The task of the 15th International Edition of the Multi Comfort Student Contest, developed by Saint-Gobain, in close collaboration with Milan Municipality, was the rejuvenation and urban reconnection of Crescenzago metro station area, in line with milano2030. ■

First place for desert-inspired design

Midhun Mohan, a fifth year Architecture student, was awarded first place in Art4you's Live Art Competition, organised by Dubai Outlet Mall and held on 7 June. The theme of the competition was Ramadan – Eid, and a trip to the desert near Ras al Khaimah was organized for the participants. The inspiration behind Midhun's painting was his experience of the visit, which portrays and applauds the hard work of the shepherds in the desert. ■

Midhun is presented with his award

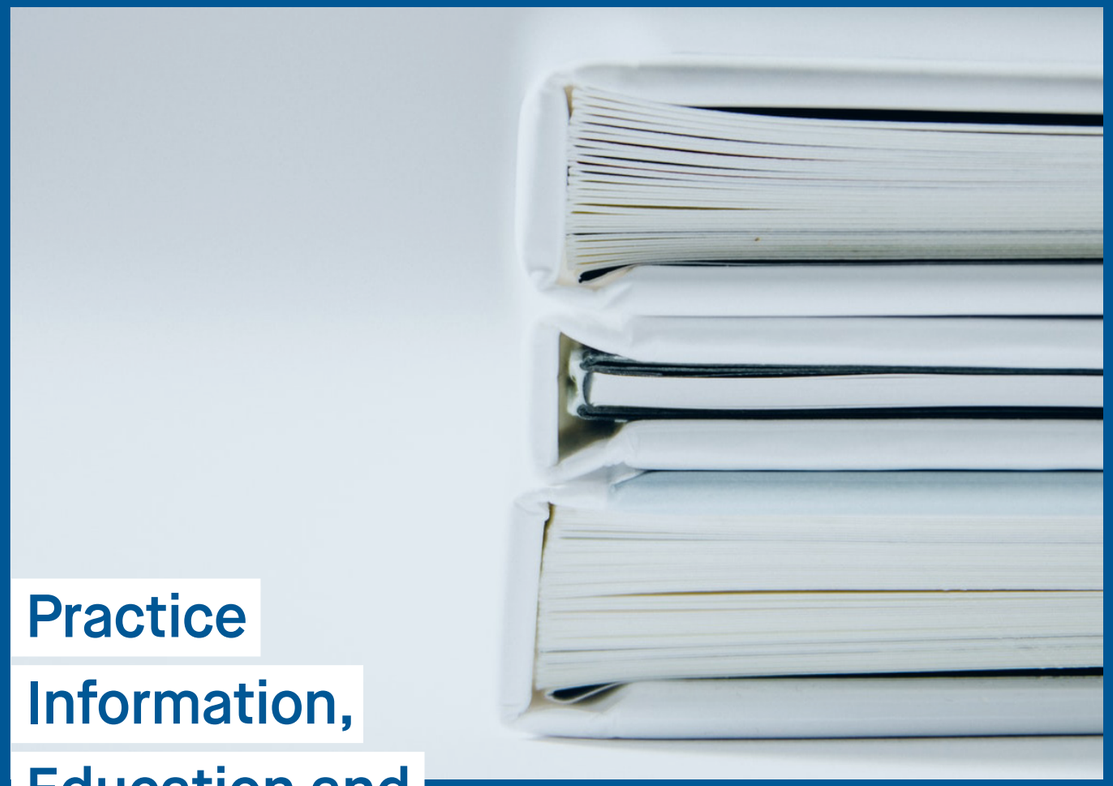
International Vertical Studio to Tbilisi, Georgia, April 2018

Every year, the School of Design & Architecture organises an international field trip to various places, with the sole purpose of providing students with visual insights and firsthand knowledge and experience on the architectural spectacles that they are witness to.

The School of Design & Architecture decided to take an innovative approach by internationalizing 'The Symposium' held every year, consisting of Vertical Studio and combining it with the annual international field trip, to make it an enriching experience of a unique nature. Additionally, the School also decided to open the doors of the Symposium (MISD - Manipal International Symposium of Design) and the international field trip to Civil Engineering students from the School of Engineering and Information Technology to boost and appreciate cross discipline interaction.

Located on the intersection of Europe and Asia, with closeness to the lucrative Silk Route, Tbilisi, Georgia has been home to people of multiple cultural, indigenous and religious backgrounds. This echoes in its architecture, which is a mix of medieval, Neo classical, Beaux Arts, Art Nouveau and Soviet Modernist Structures. This combination enticed the department to plan the Vertical Studio in the city of Tbilisi, Georgia in April 2018.

The focus of this Vertical design-based studio in the Soviet Modernist Tbilisi was to map the progressive social changes, while attempting to decipher and document the city. The Studio was aimed at understanding the global design community and creating a platform for a high-level dialogue about the leading role of human interaction within the built environment. In conjunction with the culture, society and economy of the city, the intention was to sharpen the senses, explore the overall aura of the city of Tbilisi, peel away the layers of history and interpret spatial integrity in a city overshadowed by Soviet occupation until a few decades ago. ■



Practice Information, Education and Guidance

Ever wondered what kind of documentation the industry uses? Are you undecided as to whether you would like to be an employee or run your own business after your studies?

CIAT has prepared documents for you to use as an educational tool to help you understand your roles and responsibilities as a practising Architectural Technology professional.

Please log in to ciat.org.uk and find out more in your My CIAT area: **Practice Information, Education and Guidance.**

Student showcase: Architectural Technology Teaching Information Centre

© Joe Hyett

“2019 has been a great year for Architectural Technology and Design at the University of the West of England (UWE),” says David Noble, Senior Lecturer. “Our three-year degree programme has produced some unprecedented levels of skill, architectural ambition and technical resolution.”

David continues: “This project, ATTIC, is the final studio project in third year and the students are tasked with designing an infill building on Bristol Harbourside. This building aims to provide a teaching and demonstration building from which an imaginary Architectural Teaching, Training and Information Centre is to be housed. This 11-week project asks specific regulatory and technical questions in regard to fire, escape, acoustics and concept.”

“One of our recent graduates – Joe Hyett – has shown real talent, drive and enthusiasm for the subject and we believe defines what a modern Architectural Technologist should embody.

“His architectural curiosity, concept development and ultimate technical ambition has been impressive.

“Joe’s solution is both dramatic and sympathetic, combining well resolved service, material and technical solutions.”

Read Joe’s summary on his project on the next page:

> The project has been a great learning tool and gave great insight into what it means to be an Architectural Technologist

© Joe Hyett

Design concept

The concept is formed from a ‘solid white box’ volume. This inspiration was taken from the surrounding ‘square’ warehouse volumes. The initial volume is then split to create a uniform square grid. White surfaces inform the external skin of the ‘solid white box’. These surfaces are then pushed back to create a series of voids to expose the timber core and structure. The resulting voids create the open public spaces, while the solid boxes contain the private and semi-private activities. A large glass curtain wall is then added to reinstate formality to the facade.

The pushing back of the boxes helps to create a clear divide between the new and existing building. By choosing to strip bare the existing structure back to its shell, interesting spaces and a consistent floor level can be achieved along with higher floor to ceiling height in the cafe and gallery spaces.

The facade boxes generate interest on the elevation and also inform the spaces within. Each box is visually identified internally and create small flexible work spaces.

An open lecture space is located on the ground floor. This 'open' concept invites everyone to listen in, take part and contribute to the discussions and public lectures.

The studios are a key aspect of the design. Three ‘open’ studios spaces, divided per storey, accommodate six studio courses. They are open, flexible, adaptable, and designed to encourage collaboration and the sharing of ideas.

Technical resolution

Taking cues from the Lufthansa Aviation Centre, the glass facade forms the thermal barrier of the building. A minimal clamp system and two vertical tension wires have been utilised between panes of Low-Emissivity (Low-E) coated, insulated glazing. The tensioned cables extend from ground floor base plates to the roof and terminate with a steel fabricated housing. The housing on the roof tied back to the mass timber structure and the base housing is cast into the ground floor concrete slab. The post-tensioning is facilitated by threaded clasps within the ground floor housing detail and is accessed via the removable grilles.

The visible facade continues beyond the ‘thermal barrier’ created by the curtain wall facade onto a series of pushed boxes. The solid white volume breaks in line with its structural grid to form a series of internal spaces. The boxes themselves are clad in Siberian Larch timber with a Kawneer double glazed window over which is a perforated white powder coated aluminium screen. The screen has three main functions: reduce solar gain, reduce glare and add privacy.

Piled foundations are used with cast concrete pile caps integrated with the reinforced concrete floor slab.

The super-structure is formed by a grid of 3780 x 3780mm Glulam columns and beams, which hold cross laminated timber (CLT) floor slabs. In situ cast concrete cores form the stairs and lift shafts provide lateral stability. Steel cross-bracing is used with the structural bays to provide stability to the frames not connected to the cores.

Fresh air is drawn in through vents, which bypass the stack on the eastern facade and is diffused via floor vents. Warm air rises and exhausts through the extract vents located at the head of the ‘boxes’ on the perimeter of each storey. This air then continues to rise through the void in the ‘double facade’ to finally exhaust through the roof ventilation box along the length of the east and west facade. Ventilation is automatically controlled through a Building Management System (BMS) system. This allows the building to open and close vents to regulate its own temperature.

The CLT floor slabs have two layers, 160mm and 80mm to enable service runs to be created between them. This allows services such as mechanical ventilation ducting and electrical conduits to be installed within the floor slab. Floor hatches give access to these areas for maintenance. Each structural bay has a dropped, fire-retardant, treated, wooden, slatted timber ceiling. This drop in the ceiling accommodates the lighting, sprinkler system and electrical wiring runs.

The building is designed with two concrete escape stair cores.
All glulam columns and beams have been oversized with the intention of creating a sacrificial layer for fire protection. In the event of a fire, the Glulam structure will char forming a protective layer.

Due to the high fire load expected in Architectural studios, and combustibility of timber, an automated sprinkler system will be installed throughout with two connections to the water mains system and two separate risers. The system will therefore operate even in the event of a system failure or if one is shut down for maintenance.

© Joe Hyett

Conclusion

One of the key aims was to create a strong ‘readable’ design concept and base the design choices on architectural composition. The project has been a great learning tool and gave great insight into what it means to be an Architectural Technologist. Developing the architectural design, detailing and being able to push the technical development further has allowed the building to deliver the initial architectural design concept. This focus and in-depth research into engineered timber technology throughout the year has aided personal development, resulting in a striking architectural project. ■

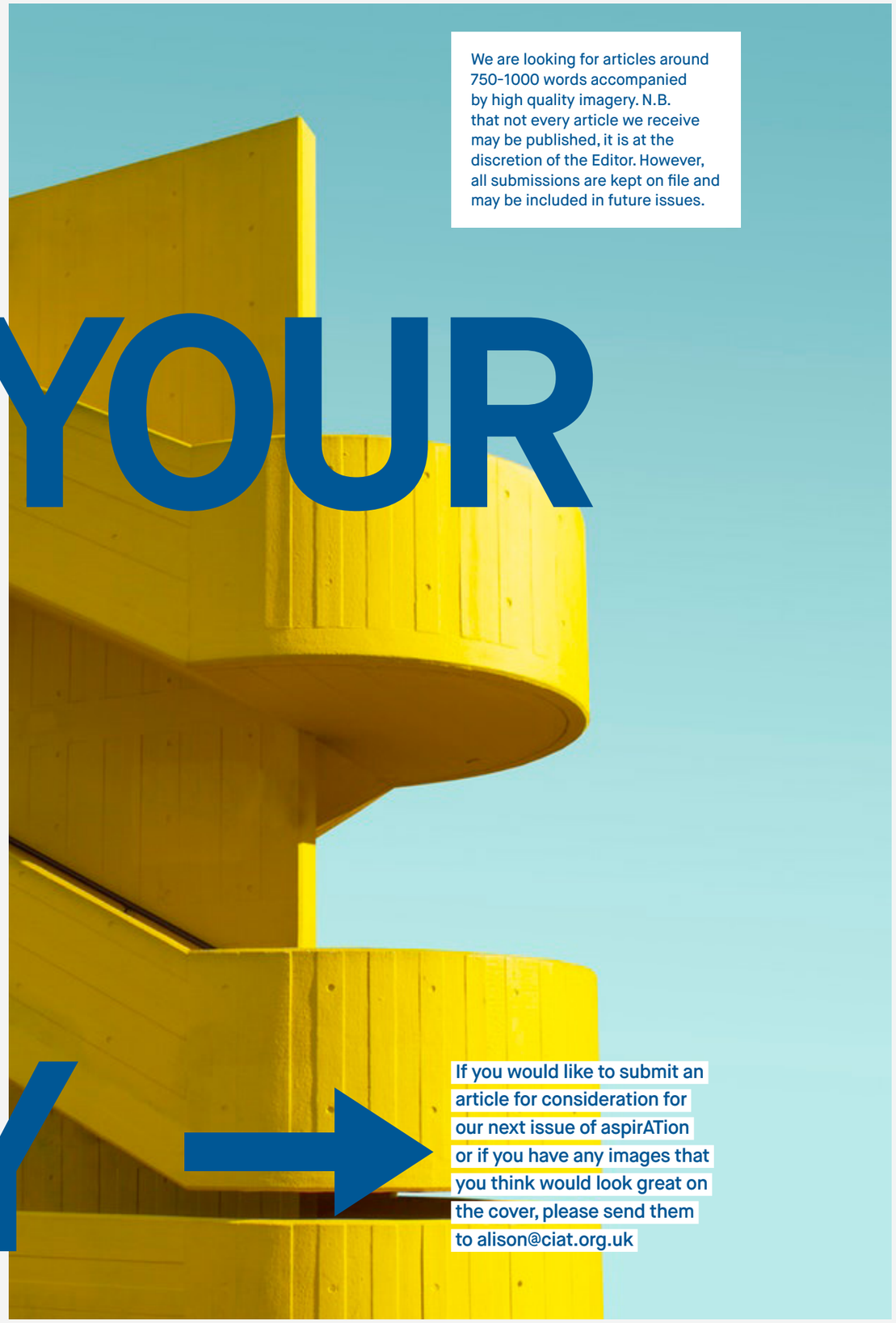
SUBMIT YOUR COPY

Your article could be on any of the following:

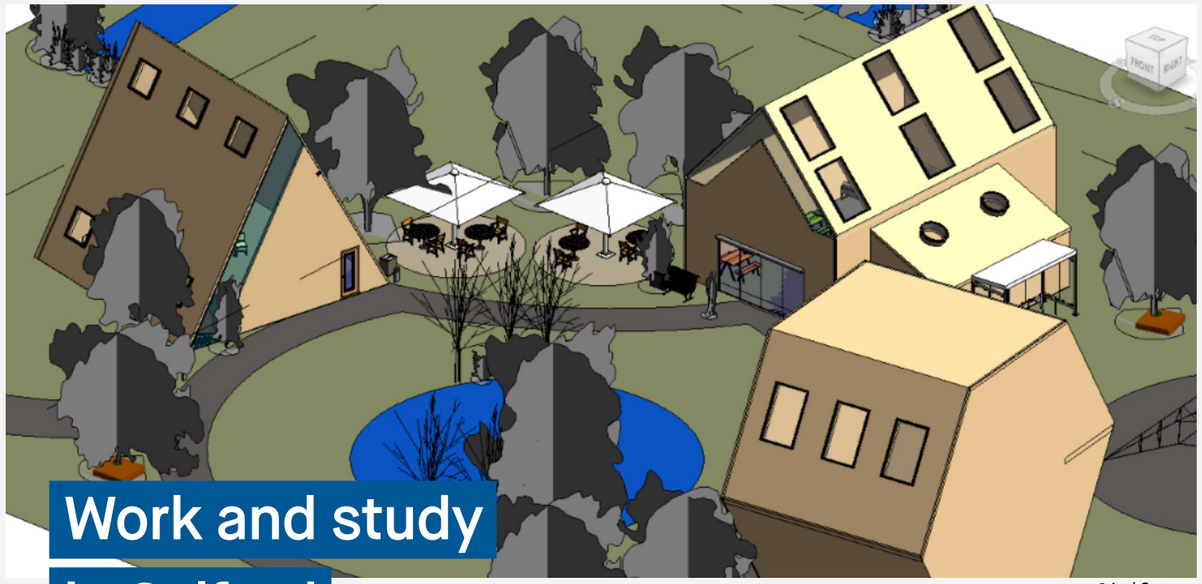
- Why did you choose to study Architectural Technology? We welcome a case study from full time, part time, international or sandwich year students;
- Site visits taken place throughout your programme;
- Work placements;
- Competitions and awards that you have taken part in;
- Reviews of modules and programmes that you have undertaken;
- Cultural review of where you live and study, places of interest to visit for other students;
- Recommendations and reviews of useful resources you have used such as software, websites etc;
- Showcasing your work - could be a project, dissertation, your involvement in the end of year shows;
- Any other extra-curricular activities you have undertaken.

This list is not exhaustive and just a few ideas that you may like to write about. It would be great to hear from you with any suggestions.

We are looking for articles around 750-1000 words accompanied by high quality imagery. N.B. that not every article we receive may be published, it is at the discretion of the Editor. However, all submissions are kept on file and may be included in future issues.



If you would like to submit an article for consideration for our next issue of aspirATion or if you have any images that you think would look great on the cover, please send them to alison@ciat.org.uk



© Izzi Garvey

Work and study in Salford

Izzi Garvey

Izzi Garvey is a student member studying the BSc (Hons) Architectural Design Technology at the University of Salford. Izzi studies part-time whilst working as an Assistant Architectural Technician at Bellway Homes North West.

After years of playing with Lego, building bricks and enjoying woodwork and design in school, I never knew I'd be where I am today!

I took part in many summer schools while completing my GCSEs, including 'Design to Make' at Manchester Met University and PLACED Academy Summer School. PLACED became a big part of my journey, as I spent time doing workshops in school, college and at weekends with the organisation. This gave me the chance to receive advice from industry professionals, obtain presentation skills and gain assistance with putting a CV together. This also opened up various other pathways to achieve my dreams.

I have now become a PLACED Ambassador, which has allowed me to present to young children at the PLACED Academy Liverpool, speak to the public as part of Regenerating Liverpool at the Albert Dock, Liverpool and meet and work alongside other students.

Whilst at school, I took advantage of the time allocated for work experience. Having contacted many local housing developers, I was awarded two weeks at Bellway Homes Head office in the North West. I spent my time there shadowing the architectural professionals and visiting various show homes in the local area. I then continued to visit Bellway for more experience during the school holidays. As a result, after completing my A-Levels, I was offered a position at Bellway Homes as a Trainee Architectural Technician, as well as the chance to study on the Architectural Design and Technology programme at University of Salford.

I chose the University of Salford as it was away from my home city and because Manchester has so many interesting construction projects in the city centre. The programme is delivered through three modules per semester for five years, working alongside other disciplines such as Building Surveyors, Quantity Surveyors and Real Estate –

> "My dream is to one day design and build my ideal home, as a reflection of my work and knowledge""

which echoes the way things work in the real world. My latest project was based around a piece of land adjacent to the University and surrounded by the River Irwell. We were asked to design a Wellbeing Centre for students and the local community. The project consisted of a site visit and analysis, followed by a precedence board, concept and designs ideas using Revit and CAD and a final model which was then presented to my fellow students.

By studying Architectural Design Technology, I have also been able to get involved in projects in the local area. I have recently been part of the renovation of the C.I Club in West Derby for the Hockey Team I captain and play for. The building is an old Victorian style house with three floors and a cellar. The renovation has included the installation of a new bar, new feature windows and DIY work such as plastering, painting and laying of new carpet.

Since starting university, I joined CIAT as a student member. This has allowed me to attend many CPD events. I also read industry publications, such as ABCD (Architecture, Building, Contracting and Developing), Archdaily and Construction Week to ensure I am up to date with the latest technology and news.

Throughout my role at work, I have gained a strong knowledge in a variety of areas such as the Building Regulations including U-Values, SAPs, EPCs all assisted by using and learning the software CAD. I have also sat my CSCS exam and have spent multiple weeks on site shadowing the Site Managers, Ground workers, Joiners and Landscapers. I have taken part in airtightness testing, building inspections and home demonstrations.

Recently, I have been promoted to Assistant Architectural Technician which has led me to have more responsibility and control over my individual sites. This includes attending Build Tech meetings, producing drawings on CAD, writing specifications, submitting planning applications and dealing with solicitors and legal plans. The projects mainly include building one, two and three storey, detached and semi-detached houses.

My dream is to one day design and build my ideal home, as a reflection of my work and knowledge. I hope to continue working in the built environment industry to enhance my ideas and designsand becoming a successful figure for others to follow. ■

© Izzi Garvey

© Liam Jones

Why I chose Architectural Technology

Liam Jones ACIAT

Liam Jones, an Associate member, works as an Architectural Technician at Randle White Architects Ltd. When he isn't surveying or writing building specifications, Liam is Mayor for Frodsham, a market town in Cheshire.

Little did I realise that Architectural Technology and everything it encompasses – design, structure, function, purpose – would fascinate me!

From eight years of age, I used to play with Knex, creating two-metre-high towers, as well as building cruise ships and cranes. Since the beginning of high school, I have always enjoyed engineering using AutoCAD, which allowed me to design and build whatever I was tasked to do.

It was this that allowed me to explore my curiosity in terms of the way something is designed and how it could be practically made. By using this software, I was able to create useful schematics for the design of my boiler and bearing house project.

Whilst at high school, I completed my work experience at an architectural practice where I learnt to use Google SketchUp to create 3D models. I worked on a hypothetical project for a Lewis Carole Centre in Daresbury, Cheshire as well as a commercial unit for a plot in my home town of Frodsham. These had to be designed to the client's brief, with consideration given to the surrounding built environment. I used these designs to consult and later to present to some of the staff in the practice, to convince them and justify that this was the right design for each of the projects.

At 18, I developed an interest in politics, which then led to me standing and becoming a Frodsham Town Councillor. I am now on my second term in office and the proud Mayor for Frodsham, Chairman of the Planning Committee and a member of the Frodsham Neighbourhood Plan, which focuses on future land use.

As a Councillor, I was lucky to have the opportunity to use what I have learnt working in architectural practices, to help campaign for things I am passionate about and to improve buildings and spaces for the local community.

I believe this combination of experience and skill has rightly led me to start a career in Architectural Technology. I currently work as an Architectural Technician at Randle White Architects Ltd. My day to day job mostly involves surveying, creating and setting up existing and feasibility plans, taking planning drawings to the Building Regulations stage, seeking quotations and appointing Structural Engineers, SAP consultants, writing the building specifications, creating details and communicating with the clients and Building Control departments.

> Architectural Technology and everything it encompasses – design, structure, function, purpose – fascinates me!

A development of four new detached family homes is currently under construction. The image below is a CGI of what one of these will eventually look like. This is a traditional yet very modern 5-bedroom family home, using traditional features such as stone heads and cills, brick bands and flush timber casement windows.

I really enjoyed working on this project because the developers, Abode Property Development, truly embraced the design, creating stunning quality crafted homes, which I had the pleasure of seeing for myself during a site visit earlier this year.

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Recently, the practice has started surveying domestic and commercial premises with our new 3D Zeb Horizon piece of equipment, which allows us to create plans and elevations more accurately than ever before. We used to do this exercise using a tape measure and clip board, which took hours; whereas now, creating a survey is a matter of minutes!

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Above is an example of a survey I did using the Zeb Horizon. As you can see, the orange image is what has been created using the 3D scanner, after we have manipulated the 3D model. The black and white image is what we have created using the model. It has completely changed the way we operate, improving the quality, precision and accuracy of our surveys.

Having recently completed my HNC in Construction and Built Environment, my plan now is to start at the University of Salford studying the BSc(Hons) Architectural Technology degree, part-time. ■

You can follow Liam on Twitter using @CllrLJones

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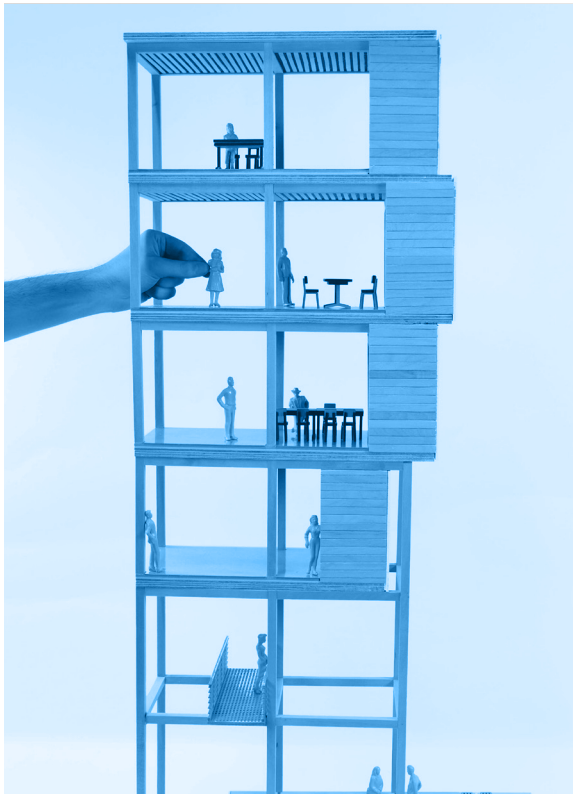

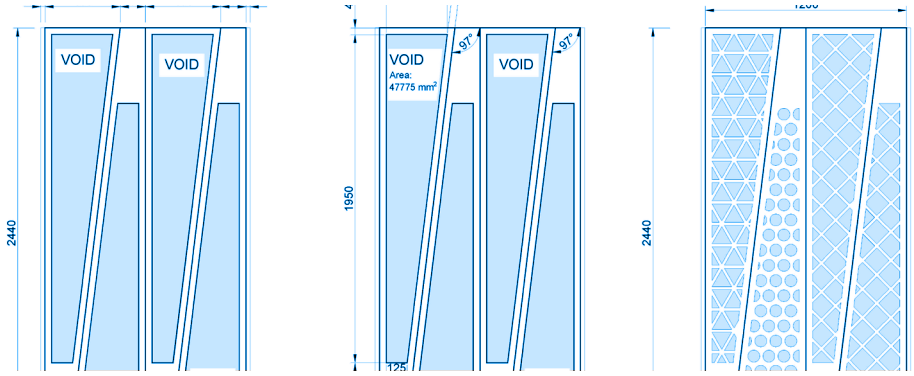

aspirATion magazine
Issue 9
Autumn 2019
ciat.org.uk