

Diploma in Collaboration in Construction 2024

Academically benchmarked by



Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

 **Constructing Excellence**
Midlands

Collaboration
Leadership
Psychology
Sustainability
Process
Value
Integration
Design
Compliance
Management
Contract
Smart

What's In This Document?

Diploma Academic Accreditation

1– The Essential Need

Why is this Diploma required?

2– The Course Proposal

What are we proposing this Diploma will achieve?

3– The Course Benefits

How will the Diploma help the delegates and construction?

4– Courses and Tutors

What is taught and by whom?

6– Example Course Module

What can the delegate expect to study on the course?

8– Diploma Case Study

What can delegates achieve?

9– Survey on Collaboration

Feedback on collaborative working from 2020 to 2022

10– Costs and Details

How much does the course cost and what are the future plans?

The University of Wales Trinity Saint David (UWTSD) feel very privileged to be working with Construction Excellence Midlands to enable academic benchmarking of the innovative 'Diploma in Collaboration in Construction' provision.

Constructive collaboration is the first step towards a better industry in general, significantly improving trust and enabling far more interaction between different a wide range of teams and companies. We fully recognise that construction projects are becoming more complex. Effective collaboration is increasingly becoming a key factor in completing projects on time and within budget while delivering a quality product for our clients. The University identifies collaboration as also leading to many benefits like adoption of new innovations, while still delivering time, and cost-savings for the client.

Good project collaboration is more than just everyone completing tasks on schedule. It involves building a strong relationship with all stakeholders based on trust and respect to work together to successfully complete a project. Being able to cooperate and coordinate efforts to improve productivity is essential.

By collaborating with Constructing Excellence Midlands, The University of Wales Trinity Saint David have academically benchmarked this provision. This allows us to identify and recognise the level of academic learning being met by those attending and completing this innovative programme. We feel that by supporting this exciting provision, innovation and best practice within the construction sector can be distributed widely through clear channels of collaboration, knowledge sharing and networking.

Gareth Wyn Evans

Head of the Construction Wales Innovation Centre at University of Wales Trinity Saint David



Why is this Diploma required?

The Essential Need

There can be no doubt that the need for collaborative working within the UK construction industry has never been greater. Report after report since the mid nineties have outlined the necessity for collaboration to replace the traditional adversarial culture and for integrated supply chains to replace the fragmented nature of the sector. More recently Dame Judith Hackitt commented in her review following the Grenfell tragedy:

“We need to maintain the spirit of collaboration and partnership which has been a feature of the review process to date. In a sector that is excessively fragmented, we have seen during this review a will to work together to deliver consistent solutions. This will be especially important going forward to change culture.”

With productivity one of the current priorities within the Construction Leadership Council's roadmap, the need for our industry to adopt lean principles is essential and to be able to do this we must adopt a collaborative culture. The only way we can deliver 'more for less' or to get a 'bigger bang for our buck' is to have integrated collaborative supply chains. This level five diploma, academically benchmarked by the University of Wales, sets out to deliver the tools and techniques individuals will need to ensure that this essential collaborative culture can be delivered.

One client recently commented, *'the UK construction knows the word collaboration but doesn't have the necessary behaviours and culture to deliver it'*. Delegates undertaking this diploma course will add additional important skills in collaborative working to the advantage of themselves, their organisation and any projects on which they are involved. Clients will want their supply chains to have these skills and supply chain members may use them to win work. This diploma course provides you with the chance to be an early adopter in this critical area.

Andrew Carpenter
Chief Executive
Constructing Excellence Midlands



The Course Proposal

CE Midlands will deliver an eight month online course on one half day a month followed by additional reading material, homework and an indication how what has been learned will be included in the delegates' day-to-day activities on the following topics:

Inclusive Leadership <i>Lisa Reynolds, Ioda</i>	1
Introduction to the Principles of Collaboration and Integration in Construction to include the Construction Playbook, Value Toolkit & ISO 4401 <i>Marc Preite, Center Parcs</i>	2
Design for the Environment <i>Noel Street, Places Development Consultants</i>	3
Smart Construction (Digital and Offsite) <i>David Emery, Supply Chain Sustainability School</i>	4
Quality and Compliance <i>Richard Cymler, Sweco</i>	5
Lean and Continuous Improvement, Process and Value Stream Mapping <i>Richard O'Connor, Aspen Global</i>	6
Procurement to include IPI Initiative & The Gold Standard <i>Louise Lado-Byrnes, IPI Initiatives</i>	7
Conclusions & Implementation Programme <i>David Emery, SCSS</i>	8

Tutors may change due to circumstances beyond our control

The Course Benefits

Aims to create

- The next generation of leaders
- New behaviours
- Positive disruption
- Technology-led approaches

Individual

- Tools and techniques
- Networking with industry peers
- Developing new contacts
- Develops mutual understanding within the team
- The chance to enjoy working within the construction sector

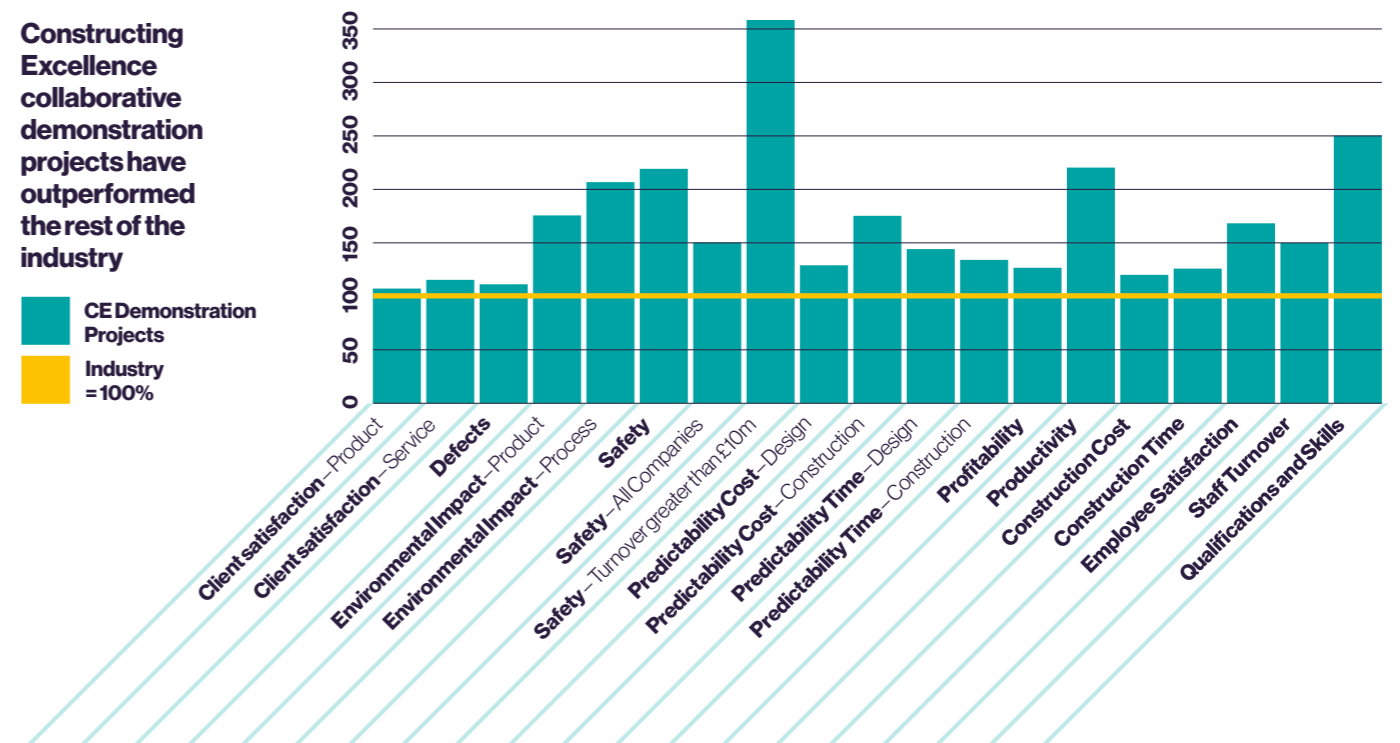
Employer

- Preparedness of future leaders
- Positive response to gap analysis in collaboration
- Show potential clients you have staff with accredited collaborative skills

Industry

- Fulfil need identified by clients
- Highlight financial and other benefits as shown below
- Galvanises pockets of best practice into one diploma
- Ability to deliver on industry reports e.g. *Hackitt Review, Construction Playbook and Value Toolkit*

Constructing Excellence collaborative demonstration projects have outperformed the rest of the industry



Courses and Tutors

“Excellent session. Most relevant to my work thus far. Steve was very inclusive and helped bring some good discussions.”

“Really enjoyed the module and have taken a lot of ideas away and want to see how I can implement them, within the context of work we undertake. Like a few people mentioned at the end, I would love to here if you had examples of how integration has worked on smaller projects where it is a lot more tempting to pick the traditional. Again, really good presentation. Great to have multiple speakers bringing their expertise.”

1

Inclusive Leadership
Lisa Reynolds
ioda

Lisa is Managing Director at ioda and leads on all aspect of Inclusive Leadership and Workplace Inclusion including strategic consultancy support and senior leadership development within the construction industry. She works closely with the Supply Chain Sustainability School and with many of the UK major construction companies, as well as providing support to European and Australian companies. Lisa develops tailored support including the design and creation of innovative leadership development programmes that blend Equality, Diversity and Inclusion as key behaviours for Leaders within construction. She is also a frequent guest speaker at international conferences on Gender Inclusion and removing barriers for minoritised groups.

Lisa regularly provides specialist consultancy support to executive teams and senior leaders to identify, advise and implement strategic initiatives to drive and embed inclusion at every level. These include major infrastructure programmes across the UK as well as strategic cultural change projects including training and consultancy to the Sudan National Police Service on equality and human rights a part of a UK Government Aid project.

Having worked in this field for over twenty-five years, Lisa remains resolute in her belief that to witness a real sea-change in how organisations operate, the transformation to true inclusion must be driven from the top by creating truly inclusive leaders. It is part of her mission to provide the support that will empower these leaders to act.

2

Introduction to the Principles of Collaboration and Integration in Construction to include the Construction Playbook, Value Toolkit & ISO 4401
Marc Preite Center Parcs

This diploma equips delegates with a set of collaboration tools, along with the knowledge of when and how to use them, which is not available anywhere else. The course provides a unique learning opportunity, where clients, consultants and the entire supply chain go through the learning process, together.

On this course you really will develop mutual understanding across all parties, which is the vital ingredient to a long-term collaborative relationship. Arguably there is as much value in the collaborative learning process, as there is in the learning itself.

Marc's experience has included several collaborative service improvement projects for multiple clients such as major housing associations and NHS Trusts. He was one of the national leads on a two-year journey where 20% savings were realised across cost, time and value and increased customer satisfaction to new highs on the delivery of capital and responsive programmes. Marc has lived and breathed collaboration since learning, practising the behaviours, skills, and tools contained within this diploma.

In the first module of the diploma Marc will give an overview of each of the modules and their importance and cover the common issues running through them such as:

- Current issues/factors
- Risk
- Culture and behaviours
- Why it goes wrong
- Common barriers
- Cost versus price
- Value and waste.

3

Design for the Environment
Noel Street
Places Development Consultants

Noel has recently set up TriPlaces Developments, following over 35 years working as Director of major architectural and multi-disciplinary practices including 3D Reid, AHR, Corstorphine & Wright, RPS and Atkins. He brings extensive experience of developing and managing client relations, project programming, managing and delivering positive outcomes on large scale, complex projects and frameworks across all project phases of Public and Private Sectors in the UK.

This module will provide the following:

- Introduction to sustainability and the role of construction in tackling climate change
- Understanding and reducing energy consumption and carbon emissions in the built environment
- The impacts that materials and the supply chain have on emissions
- The importance in considering the built environments impact on health and wellbeing.

The built environment accounts for a significant portion of the world's greenhouse gas emissions. But how much? How can we influence the built environment to reduce its fair share of consumption and emissions? How can we adapt our buildings for the inevitable impacts of climate change? And, how do we make sure that buildings are healthy and consider our wellbeing?

This module will aim to provide the participant with the general knowledge surrounding these questions.

4

Smart Construction (Digital and Offsite)
David Emery
Supply Chain Sustainability School

David Emery has provided BIM-related specialist advice and consultancy services to a range of clients, including some of the biggest construction companies in the UK, and has delivered presentations, training and workshops to more than 1,500 businesses.

David is a consultant with the Supply Chain Sustainability School and is that organisation's B.I.M. and Offsite specialist. David also helped deliver another CITB-funded project entitled 'Delivering a Digital Mindset', working with the likes of Tideway, Skanska, Costain and UCL.

In this module we will look at the following:

- What do we mean by offsite and MMC?
- What will offsite mean to the designer, the QS, the procurement lead, the logistics team, the site manager and the project manager?
- What are the characteristics of a digital leader?
- The business case for digital
- Cyber security
- Digital adoption – the construction site of the future.

The successful 21st century construction project will result from a combination of innovative thinking, collaborative working and technological advances. This module will help you understand some of the opportunities that are available and how to instigate change in your organisation.

5

Quality and Compliance
Richard Cymler
Sweco

In this interactive session, Richard will address:

- Some quality roles and definitions
- What happens when we get it wrong?
- How much does poor quality cost the industry?
- How does it go wrong?
- How can we prevent it going wrong in the future?
- Behaviour and culture in quality – making change 'stick'
- What will you do differently tomorrow?

Richard is passionate about connecting up the dots, both within and across businesses, to deliver a collaborative approach to quality.

Delegates will be equipped with the necessary knowledge and skills to understand both the real cost and root cause of error. The ability to spot in advance where the risks to poor quality lie in a project and how to avoid them.

Following the course, delegates will be equipped to work collaboratively in reducing error and thereby improving productivity across the industry. Whether Client, Consultant, Tier 1 or Tier 2, we all have a role to play in changing our behaviour in regard to quality.

6

Lean and Continuous Improvement, Process and Value Stream Mapping
Richard O'Connor
Aspen Global

Presently a Director at Aspen Global, Richard is a recognised lean practitioner, trainer and coach. In 2002, he successfully led the DTI lean construction pilot and supported the creation of the CLIP programme with BRE. Since then, Richard has held lean manager and director roles in leading UK construction companies and has worked as a consultant helping many construction clients, designers and contractors to achieve impressive improvements in project delivery performance.

In the lean continuous improvement training module Richard will cover:

- Introduction to lean principles, processes and practices
- Benefits of lean construction
- Key lean processes including – Lean collaborative planning – Visual management – 5S workplace organisation – Data collection, analysis and root cause problem solving – Work observation and productivity improvement
- Other lean processes / practices including gemba walks, standardised work, quick changeover, value stream mapping
- Case studies to demonstrate how key lean processes have helped to 'raise-the-bar' on project delivery performance
- Barriers to success and how to overcome
- Action planning to apply lean to your place-of-work and projects.

7

Procurement to include IPI Initiative and The Gold Standard
Louise Lado-Byrnes
IPIInitiatives

Louise is a Director and owner of IPIInitiatives who developed the IPI Model. She has a background in main contracting in her earlier career, worked at board level of a national contractor, from a degree in construction management and design, and latterly Collaborative Consultancy.

IPIInitiatives own the IPI Model and Alliance Contract, using Insurance Backed Alliancing (IBA). It is named in the Government Construction Strategy as a new model of construction. IBA is a positive disruptor in the industry for procurement, and delivery. The aims of the model are being exhibited daily with real changes in behaviour and a true no blame collaboration liberated by getting rid of contractual and insurance barriers. In terms of the effect on how businesses work in the digital age, it removes the contractual and insurance barriers and negates the need for PII. Louise has witnessed the freedom and innovation this permits in design and delivery over three trial projects where federated models and shared platforms, digital twin etc are used and shared from day one. Louise's module will cover the following:

- Introduction
- Introducing IPI – Building an alliance – How the insurance works – The process
- Key differences
- Alliance contract
- Suppliers and constructors integration from day 1
- Behavioural differences – contractual impacts
- Commercial considerations
- Client and alliance benefits

8

Conclusions & Implementation Programme
David Emery, SCSS

The final session of the course – The Conclusions and Implementation Programme – provides the opportunity to discuss the previous learning and to formulate students' own action plans.

It will include content around Change Management and will signpost students to further resources and support.



Example Course Module

“Coming from architectural consulting in to an MC organisation – it’s again refreshed the desire/ need to promote the topics discussed earlier in our conversations with clients etc. It has also encouraged me to be more open about what our employer could do to support wellbeing and the needs of staff. Thanks.”

An impression of what a module might look like for delegates on the fourth section of the course, Lean and Continuous Improvement.

Lean and Continuous Improvement – An Introduction

Module Leader: Richard O'Connor, Aspen Global

Module Content:

	What	Timing	Cumulative
1.	Open and overview of the session Introducing Lean • The performance of the construction sector - putting Lean into context • Definition of Lean • Brief history • Principles including the 3 elements of work • On-line poll to gather views on the level of 'waste' in the construction sector	20 mins	20 mins
2.	Interactive activity • Demonstrating lean principles	10	30
3.	Small on-line 'break-out' group activity • Question(s): - What are the key issues, blockers and wastes that you have experienced on a construction (or infrastructure) project? - What impact do these issues / wastes have on project performance? • Feedback and discussion	30	60
	Break	10	70
4.	Applying lean to enhance the performance of construction & infrastructure projects • Introducing the key 'process' based lean practices that will have a beneficial impact: - Lean collaborative planning & project management - Visual management - 5S Workplace organisation - Data collection, analysis and root cause problem solving - Work observation and productivity improvement	15 10 10 10 15	85 95 105 115 130
	Break	10	140
5.	Overview of other lean processes – Gemba /waste walks, standardised work, quick changeover, value stream mapping and analysis	15	155
6.	Making lean real – Overview and discussion of selected case studies - Lean design - Lean collaborative planning - Improving workflow - RDMAICT problem solving - Productivity improvement	50	205
7.	Maximising the beneficial impact of lean - Introducing the lean project pathway	10	215
8.	Lean applied to construction – Benefits, challenges and summary - On-line interactive poll – What do you think are the 'barriers to success'?	10	225
9.	Module homework – Waste data collection & analysis plus actions to eliminate & improve plus quantified beneficial impact	10	235

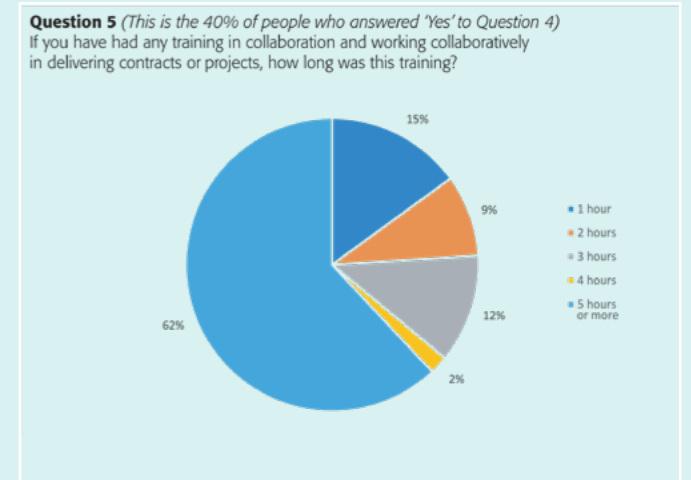
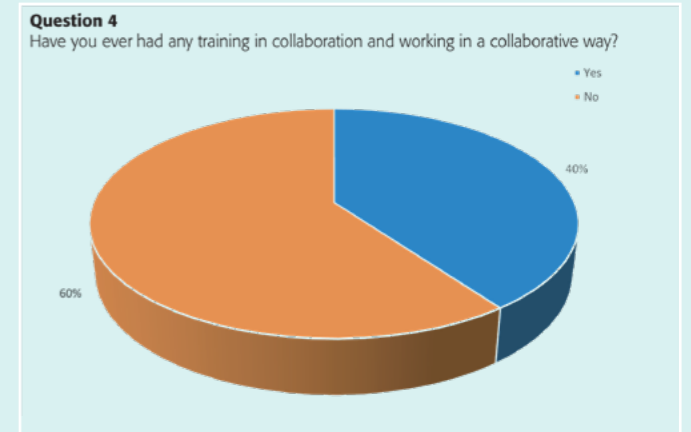
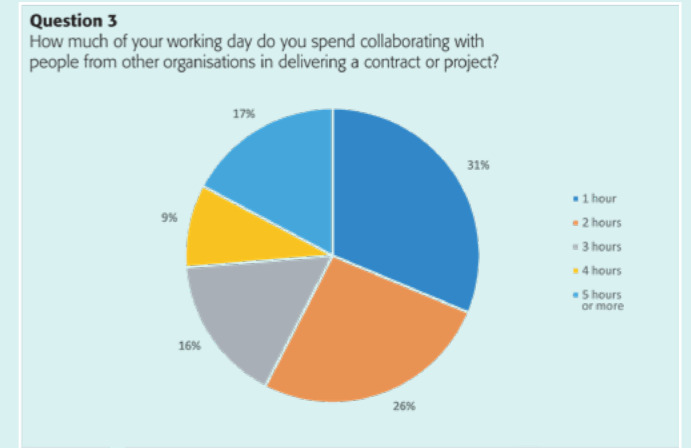
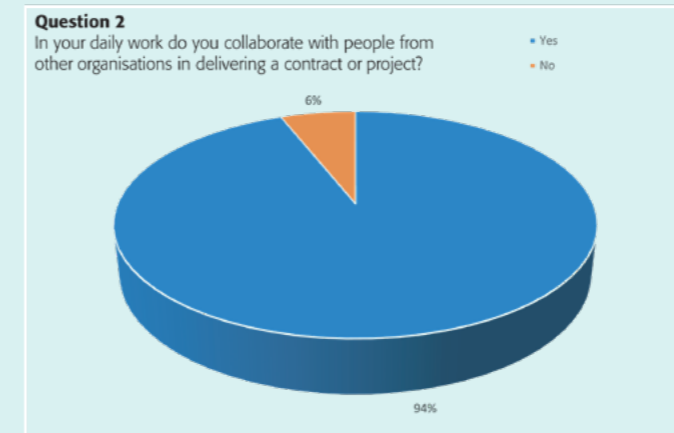
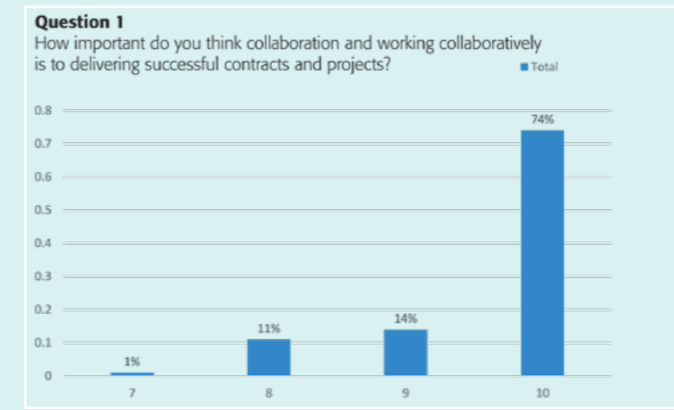
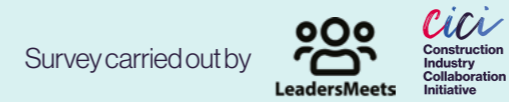
Survey On Collaboration

The purpose of the short survey was to find out:

- How important Collaboration and Working Collaboratively is;
- Ascertain how much time is spent in Working Collaboratively in delivering successful contracts and projects;
- Whether they had undertaken any training in Collaboration and Working Collaboratively; and
- If so, how long was this training.

Process

The people contacted were from a data base of those who had attended one or more of the CE Zoom webinars hosted by LeadersMeets between 2020 and 2022.



Diploma Case Study

Some recent graduates

Ele George is the founder of elevate, a sustainable construction consultancy SME. She is a sustainability consultant and environmental engineer who specialises in off-site systems and modern methods of construction (MMC). Her current focus is on the applications of retrofitting.

Rob Faro is a building services engineer and director at contractor TClarke, in its UK south region. He is also a member of the group's management board and brings experience from an electrical engineering background.

Linzi Ross is a Business Development Executive at Waldeck, responsible for identifying and pursuing new opportunities for sustainable design and engineering projects across various sectors, with a strong background in architecture, and several years experience in designing and delivering construction and architectural drawings for various sectors.

"I signed up to the diploma because I wanted to broaden my knowledge on collaborative practices within the construction sector.

"My main client is Energiesprong, for whom I fulfil the role of collaboration hub manager. The diploma is highly relevant to my work with the client, and therefore I was eager to learn more about creating a culture of collaborative working through the modules and apply the learnings accordingly.

"The sessions throughout the course were sufficiently in-depth and delivered to a high quality. They included details on each topic on collaboration in construction without being too long that it took a significant time out of my working day.

"Rather than a specific module, what I found most insightful is that there were several reoccurring themes running through each section.

"One such theme was that value-based decision making brings about the best outcomes for all – the construction workers, the client and the building users. Traditional cost-based decision making is the old approach, but for the best outcomes we must collaborate and embrace a new values-based approach, which is importantly stressed in the diploma.



"The importance of going digital was also a prominent item in the course content and group discussions. The golden thread of information is vital if we are to fulfil our aspirations to build more sustainable and quality buildings and adopt circularity approaches.

"Furthermore, off-site and MMC were repeatedly cited as ways that we can build better, but this approach in itself requires a high degree of collaboration. What we haven't yet addressed in the sector is how we can sufficiently respond to insure, fund and certify these new approaches. The technology is present but the financial support must catch up.

"One key takeaway from the diploma has been a personal realisation that most of the sector still needs to get on board and adopt an MMC-focused approach. While I am already advocating for this uptake in my role, I may be working in an echo chamber. The course has helped me to be more conscious that further education and conversations across construction supply chains need to be had.

"I would highly recommend this diploma people working across all specialisms in the industry. The course has been a great way to understand from a board range of construction professionals how and why we must adopt new approaches in construction. From writing a project brief to setting a company vision, the key learning is that collaboration and early engagement are essential if we want to share the risk but also share the reward."

As the firm's UK director for healthcare, Rob brings more than 18 years' experience delivering projects in this sector. His passion is the driving force behind TClarke's delivery of high quality, complex projects, including on healthcare frameworks and for its specialist imaging department.

Rob has recently completed the one-year Diploma in Collaboration in Construction from CE Midlands, and will be joining the module delivery team for the next iteration of the course. He said:

"I signed up to the diploma to gain additional knowledge and develop my collaborative skills, but also to pass these learnings onto the business. This will enable us to better support our clients and supply chain partners through a more united approach to the construction industry.

"I really enjoyed the delivery of the modules - the online sessions reduced the time commitment required and allowed concise, informative sessions to be delivered dynamically to participants.



"Module three, which incorporated elements of behavioural science and psychology, was a particular standout session due to my invested interest in leadership and development as part of my responsibilities at TClarke. All the modules had several points of interest and ideas that applied to my day job.

"I have since applied several takeaway items from the course to both internal development and project challenges in my own work. The key is that all these things come together to form the ingredients of a collaborative approach, where quality, value, safety and leadership can altogether deliver a better construction industry.

"I highly recommend this diploma to professionals from all construction backgrounds. The investment of time and money into this diploma not only benefits the individual but also their wider business. The resources provided are incredibly useful and relevant enough to be used daily in all sectors. By educating more people through courses such as this, we have a chance of improving construction from a collaborative standpoint.

"Taking part in the diploma has enhanced my passion for improving the industry and developing an environment where we all work together to attract the very best talent, and deliver brilliant projects. This diploma brings together people with similar goals, so I am keen to remain part of this transformation and I look forward to delivering the next course's module on The Value Toolkit and The Construction Playbook."

"I enrolled on the diploma to expand my knowledge of collaborative practices in the construction sector.

"Each monthly module acted as a useful tool, instilling best collaborative working practices that I can and will continue to apply going forward. Instead of focusing on a single module, I appreciated the recurring themes that were woven throughout the entire course, offering a comprehensive understanding of collaboration in the industry.

"The sessions were well-structured and delivered with high quality, providing in-depth coverage of each topic on collaboration in construction. They were concise enough to fit into my busy work schedule without being overly time-consuming."



Costs and Details

Course cost: £2,500 + VAT per delegate

- Note: A discount of 20% will apply for 2 or more delegates for those wishing to send attendees from your own organisation and / or from your supply chain.

Each module will take place monthly, commencing on 1st October 2024 with a face-to-face meeting in Nottingham, then as follows:

- November 2024 – May 2025 online
- First Tuesday of the month
- 09.00 – 13.00

Requirements:

- 10 hours per module
(4 hours per taught module plus 6 hours of homework / reading)

“ Looking forward to the rest of the course. It was good to understand what the diploma will help me with in my job role and how it will let me develop. The module was informative and kept my interest throughout. Great session with a good spread of people from different construction related backgrounds... couldn't fault this session.”

Disclaimer

This publication is for information purposes only and does not constitute advice including legal advice. It is recommended that specific professional advice is sought through your professional advisor before acting on any of the information or opinion given.

The views and opinions expressed in this publication are those of the relevant authors and do not necessarily reflect the views and opinions of Constructing Excellence Midlands nor the other authors.

Copyright

Copyright in all and every part of this publication rests with Constructing Excellence Midlands, and all rights are reserved. Save by prior consent of CE Midlands, no part or parts of this publication may be reproduced in any form or by any means electronic or mechanical, including photocopying, recording or any information storage or retrieval system now known or to be devised.

Copyright © Constructing Excellence Midlands.

v4-29.07.24

Online course
programme
hosted by



**For more information
contact us at:**

diploma@cemidlands.org
www.cemidlands.org

