# DIGITAL CAREERS IN BUILDING COMPLIANCE AND CONTROL

Developed by:

CGF
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Building Institute Aotearoa

BUILT ENVIRONMENT CAREER STREAMS

Ngā ara rerekē o te ao hanga taiao

# DIGITAL CAREERS IN BUILDING COMPLIANCE AND CONTROL

**This guide provides a helpful overview of the digital skills required in building compliance and control careers. It's intended to help you understand:**

- The digital skills you need for different types of roles and at different career stages
- How to develop these skills through practical application and training
- How digital capabilities can accelerate your career progression
- Whether digital specialisation might be right for you

This supplementary document should be read alongside the main 'Building Compliance and Control Career Stream' guide. Together, these guides offer a clear picture of how digital capabilities can support those in compliance careers to deliver consistent, efficient, and transparent regulatory processes.

## WHY DIGITAL SKILLS MATTER IN BUILDING COMPLIANCE AND CONTROL

The building compliance and control sector in New Zealand has the potential to embrace significant digital change in the future. Electronic consenting platforms are beginning to replace paper-based processes across most building consent authorities (BCAs). Remote inspections are being trialled and adopted, while digital systems are being used to document and disseminate information about building compliance. National consistency in consenting practices is a stated policy objective, and structural reform of the BCA system is under active consideration by government.

These changes are likely to affect everyone working in building compliance and control, from building consent officers processing applications through to building inspectors conducting site assessments, and managers overseeing BCA operations. Digital tools are reshaping how applications are received, assessed, tracked and reported on. Information that was previously held in physical files is now managed through electronic systems that require a range of skills to navigate and maintain.

Digital adoption in building compliance varies considerably across New Zealand. Larger territorial authorities have invested in digital consenting platforms that manage applications, track processing milestones, and store records electronically. Some councils and private compliance consultancies are beginning to receive and review BIM models as part of consent submissions, and mobile inspection tools are becoming widely used. However, many smaller councils and private compliance firms still rely heavily on paper-based or partially digitised processes.

> **"I see the built environment through two lenses: the physical systems that keep occupants safe, and the data that helps manage them effectively. Having regulatory knowledge is essential, but so is understanding how technology can boost our productivity and sharpen the judgments that really matter."**
>
> – Johannes Dimyadi, Fire Engineer and CEO, Codify Asset Solutions

## THE DIGITAL SKILLS LANDSCAPE

**Digital skills required for building compliance and control include:**

**Foundational technical capabilities** – Documenting management systems for consent applications, digital consent tracking platforms, basic database skills for retrieving building information and consent history, PDF annotation tools for mark-ups and review comments, digital photography and basic image management for site documentation.

**Assessment and inspection technology** – Digital consenting platforms for application lodgement, tracking and processing, mobile inspection tools and digital checklists for on-site recording, 3D model viewing for understanding complex building geometry, remote inspection platforms for live video and evidence capture.

**Collaboration and communication** – Communicating clearly through digital channels, supporting clients and applicants with varying levels of digital confidence, producing digital deliverables in professional formats suitable for different audiences.

**Records management and reporting** – Maintaining complete and accurate digital records with long-term legal significance, understanding retention and accessibility requirements, producing clear professional digital reports, and contributing to organisational and sector-level reporting.

Integration of digital and regulatory expertise – Using digital tools within regulatory systems where accuracy, auditability, and statutory compliance are paramount, applying the Building Code and Building Act requirements using digital tools, and maintaining the accuracy, security, and integrity of regulatory records.

## INTEGRATING DIGITAL AND TRADITIONAL SKILLS

Digital skills enhance rather than replace traditional compliance capabilities. Digital integration doesn't alter the regulatory obligations or the technical judgement at the heart of compliance work, but it does change how compliance professionals receive, assess and record information, and how they communicate decisions.

Building compliance professionals need digital skills that enable them to work effectively within electronic consenting environments, apply the Building Code and Building Act requirements using digital tools, and maintain the accuracy, security, and integrity of regulatory records.

Unlike other roles within the industry where the digital environment is characterised by collaboration platforms and model-based workflows, building compliance professionals mainly operate within regulatory systems where accuracy, auditability, and statutory compliance are vital.

**Digital skills required for compliance and control include:**

**Consent processing** – Digital consenting platforms streamline application lodgement, tracking, and processing workflows. Consent applications increasingly take the form of digital submissions, including BIM models that can be navigated and interrogated rather than assessed solely from 2D drawings. Effective consent processing still requires deep knowledge of the Building Code and the ability to exercise professional judgement on complex applications.

**Inspections** – Mobile inspection tools and digital checklists support on-site recording of inspection findings, with photo and location data captured directly into compliance records. Remote inspection platforms enable live video assessment for certain inspection types. Quality assurance depends on knowing what good work looks like, understanding construction tolerances, and recognising when something isn't right on site.

**Records and documentation** – Building compliance work produces records with long-term legal and practical significance. Consent records, inspection reports, BWoF documentation, fire safety assessments, and weathertightness reports may be accessed years or decades after they are created. Digital systems must support the creation and long-term retention of accurate, auditable records.

**Compliance monitoring** – Data analytics can identify patterns in consent processing times, common non-compliance issues, and inspection outcomes to support resource allocation and process improvement. Building warrant of fitness and fire safety compliance systems are supported by digital scheduling, automated reminders, and centralised record-keeping.

**Code checking and emerging technologies** – Automated code-checking tools have the potential to pre-screen designs against specific Building Code clauses, supporting professional assessment. BIM-based consent submissions are uncommon but expected to increase. These emerging capabilities will require compliance professionals to develop new skills while maintaining their core regulatory expertise.

## DIGITAL SPECIALISTS IN BUILDING COMPLIANCE AND CONTROL

Digital tools are beginning to change how compliance is checked, documented and tracked. Remote inspection platforms and digital compliance scheduling are now in widespread use, and systems and processes are being developed for automated code checking against BIM models.

Specialist roles emerging in this space require professionals who understand both the regulatory framework and the digital tools that can support more consistent, efficient, and transparent compliance processes. At the moment, digital specialists in this space tend to be focused more on the development and introduction of new tools, rather than actually working with them in practice.

### DIGITAL QUALITY ASSURANCE AND DOCUMENT CONTROL SPECIALIST

This role manages the digital systems and processes used to capture, organise and verify construction quality records and compliance documentation throughout a project. As construction projects generate increasing volumes of digital

records, there is a growing need for specialists who ensure this information is structured, traceable and accessible for consent and handover purposes.

**Core responsibilities**

- **Quality records system management** – Configuring and administering digital quality management platforms (such as Aconex, Procore or equivalent) to capture inspection and test records, non-conformance reports, and hold point sign-offs in a structured and searchable format.
- **Document control and traceability** – Maintaining rigorous version control and traceability for compliance-critical documents including drawings, specifications, producer statements, and engineering certifications, ensuring that current approved versions are accessible to all relevant parties.
- **Compliance evidence packaging** – Assembling and quality-checking digital documentation packages required for code compliance certificate applications, making sure all required evidence is present, correctly referenced, and aligned with the building consent and approved plans.
- **Handover documentation coordination** – Coordinating the collection and structuring of operation and maintenance manuals, as-built records, warranties, and compliance documentation for handover to building owners, ensuring information is complete and usable for ongoing building management.

## REMOTE INSPECTION TECHNOLOGY SPECIALIST

This role supports the development, adoption and operation of digital tools and platforms used to conduct building inspections remotely. The specialist ensures that remote inspection technology is deployed effectively, produces reliable evidence, and meets the standards required for compliance decisions and record-keeping.

**Core responsibilities**

- **Remote inspection platform management** – Selecting, configuring, and managing remote inspection platforms that enable live video, as well as photographic evidence capture, annotation, moisture meter readings, and plan-directed inspection workflows.
- **Inspection protocol development** – Developing protocols and checklists that define which inspection types are suitable for remote assessment, what evidence is required, and how digital records should be structured and stored to support compliance decisions.
- **Quality assurance and evidence management** – Ensuring that digital inspection records, including video, photographs, annotations, and measurement data are complete, securely stored, and retrievable for audit, dispute resolution, or code compliance certificate issuance.
- **Training and change management** – Training relevant personnel in the use of remote inspection tools and processes, supporting adoption and ensuring consistent practice across inspection teams and sites.

## BUILDING DIGITAL CAPACITY

For building compliance professionals, building digital capability requires curiosity and willingness to learn, practical application and continuous skill development. The pace of digital change in the compliance sector means that professionals at all career stages need to develop and maintain their digital skills.

## SELF-DIRECTED LEARNING

Most digital learning happens through curiosity or need-driven learning, rather than formal training programmes. If you enjoy exploring tools and solving problems independently, self-directed learning will generally be the best approach to develop your capabilities more quickly. This includes:

- **Online tutorials** – free resources for most compliance and construction software, searchable for specific tasks.
- **Software vendor resources** – most platform providers offer structured learning paths for their consenting and inspection tools.
- **Industry webinars** – regular sessions from software vendors, MBIE, and industry organisations on digital compliance topics.

## FORMAL EDUCATION AND TRAINING

Tertiary education organisations, including vocational providers, wānanga, and universities increasingly include digital construction skills in their programmes.

Institutions offer courses, diploma and degree options that cover digital documentation, BIM model development, digital project delivery concepts, data management and emerging construction technologies.

## PROFESSIONAL DEVELOPMENT

Alongside your own exploration of digital tools and skills, it's important to connect with broader compliance and digital construction communities, such as:

- **Industry conferences** – Building Institute Aotearoa's DigiComm conference with digital streams, MBIE-hosted building regulation forums, vendor-run conferences
- **Workshops** – hands-on technical training sessions on digital consenting platforms and inspection tools
- **Professional networks** – BCA peer networks, BIMinNZ and other user groups, as well as online communities focused on building compliance technology

## GET THE GUIDE

**Use the QR code to download the full Built Environment Digital Career Streams guide and explore the many rewarding pathways in the construction sector.**

Or head to the website: **BECareerStreams.nz**