

# NI Maths Role Models

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Senior BIM Coordinator



**dowds**  
GROUP

## What does your job entail?

The modelling and creation of Mechanical and Electrical Services within a 3D environment. I use 3D models to accurately layout pipework, electrical containment, and fixtures within a building's footprint. I must build items such as Boilers, Lights, Switches and Pumps etc. to place in the model from scratch. I also must work closely with Contracts Managers to get the information to complete my job as quickly and accurately as possible. I can also go to site when required to take measurements and make accurate mark ups for As Installed Models. I also use software to find any or all clashes between services including M&E, Architectural and Structural and make or advise on any required changes needing to be made. I will often try to figure out quicker and smarter ways to accomplish tasks and share my findings with the rest of my department. I have trained and continue to train newer members of my department to use all the required software packages and to work as efficiently as possible. Finally, I am responsible for managing the projects I work on from a BIM perspective with the help of my Department Manager when required.

## How did you get into this line of work?

I completed a National Diploma in Engineering with Computing and then started working as a Mechanical Consultant. During my four years working as a Consultant, I completed a Higher National Certificate in Mechanical Building Services. During the recession I was made redundant and shortly after applied to work with Dowds Group as an AutoCAD Technician. Over the past ten years I have worked hard to progress from my initial role to now having a lot more responsibility and working with more complicated software packages to create far more accurate models.

## Outline your career to date?

June 2006 - Feb 2010: Junior Mechanical Consultant for Cogan and Shackleton  
Feb 2010 - Nov 2011: Cashier, and Draughtsman for a Steel Fabricator  
Nov 2011 - Jan 2015: AutoCAD Technician for Dowds Group  
Jan 2015 - Jul 2015: AutoCAD Dept Manager for Dowds Group  
Jul 2015 - Jan 2020: BIM/CAD Coordinator for Dowds Group  
Jan 2020 - Present: Senior BIM Coordinator for Dowds Group

## How do you use maths in your role today?

I use maths daily from working out angles and dimensions required to route services or to make sure there is enough space in an area for all items required to fit within. I also have to work out Areas and Volumes of rooms and change services based on the cross sectional area.

## Did you enjoy maths in school?

I did enjoy maths in school, preferring mental calculations to using a calculator. This has not changed at all; I am usually happiest in work when I have to use my head to work out a solution to a problem.