

NZIHT WELCOMES YOU TO

Developing the Future – Civil Engineering Cadets in the Roading Sector



**Setting the standard for training
in the civil engineering industry.**

www.nziht.co.nz

new zealand
nziht
institute of highway technology

Civil Engineering in NZ 2017



NATIONAL ENGINEERING EDUCATION PLAN



- Shortage of Civil Engineers within NZ
- Civil Engineering still on Immigration NZ's Long Term Skill Shortage List
- Government priority – a lot of funding devoted to attracting more Engineers
- Focus on Engineering Technicians

LOCAL GOVERNMENT ENGINEERS



- Aging Workforce
- Future Proofing Key for Local Government Infrastructure Growth
- Cadet programmes critical especially if not already in place
- Geographically variable requirements and needs

NZIHT'S CHALLENGE TO ROADING MANAGERS



- RCA Forum's fantastic support for Young Engineers.
- Think about how you got your first break into the Roading Industry?
- When was the last time you offered a student a chance to work within your team?
- What have you done recently to encourage your organisation to employ an intern or a cadet?

Attracting the Right Employees



SO WHY CADETS?



- Employable students – not all go to University
- You can train them to fit your organisation's needs
- When first employed they are on a lower than average salary
- They gain practical skills while they are studying.
In time a huge plus over University Graduates

ATTRACTING EXISTING WORKERS INTO ENGINEERING



- Large employed workforce with transferrable skills into Engineering
- Pool of talent separate from other Local Government Departments and Consultants
- HR to possibly consider a broader range of candidates based on future organisational plans

NZIHT and Cadet Programmes



WHO EXACTLY ARE NZIHT?



- In the industry for nearly 20 years
- Tertiary Engineering and Infrastructure Qualifications across NZ in the main city centres
- Civil Construction and Engineering specialised short courses nationally and off shore
- Conference event management

NZIHT TERTIARY QUALIFICATIONS



- New Zealand Diploma in Engineering Civil
- Graduate Diploma in Engineering (Highways)
- Certificate in Engineering Technology
- NZ Certificate in Infrastructure Works (Level 2) and (Level 3)

CADETS AND THE NZDE CIVIL



- Study is in a block format, designed to suit people in full time work
- Blocks consist of three – four days in a classroom, the rest of the work done in the students own time and online
- Less time out of the workplace per annum verses part time at a regional polytechnic
- Four different venues if timing does not suit

CURRENT CADETS STUDYING WITH NZIHT IN THE GOVERNMENT SECTOR AS OF 1ST JAN 2017



Horizons Regional Council	3
South Waikato District Council	2
New Plymouth District Council	2
Wairoa District Council	2
Hamilton City Council	1
Napier District Council	1
Palmerston North City Council	1
Wellington City Council	1
NZ Transport Agency	1
Marlborough District Council	1
Rotorua Lakes Council	1
Buller District Council	1
Waimate District Council	1
Ruapehu District Council	1
Waikato Alliance	1
Kaipara District Council	1

How Can Local Authorities Attract Cadets More Effectively?



ATTRACTING THE RIGHT CADETS



- Build relationships with Careers Departments at Local Colleges (if not already in place)
- Identify key students that wish to stay local that are good at Maths and Physics
- Recently attended careers expos show that if school leavers are given the opportunity, the interest is there

ATTRACTING THE RIGHT CADETS cont.



- Cadets can come from other industries
- Cadets can be any age
- Open mindedness around transferrable skills
- Utilise NZIHT to plug gaps in knowledge

NZIHT

Graduate Cadet Profiles



NZIHT GRADUATE CADET PROFILE

CHRIS CHAPMAN - TARARUA ALLIANCE



NZIHT GRADUATE CADET PROFILE

JENNA NEAME – TASMAN DISTRICT COUNCIL



NZIHT GRADUATE CADET PROFILE

AARIN BANG - NZTA



NZIHT GRADUATE CADET PROFILE

HAIDEE WARD – BULLER DISTRICT COUNCIL



Personal Development and Training





- Wide range – many suitable for Local Government.
- 1-2 Day sessions.
- Delivered Nationally, off-shore as well as in-house if required.
- Industry specialists utilised.



Environmental Risks of Construction
Understanding the National Utilities Code
Successful Project Management
Managing Infrastructure Affected By Rivers
Leading High Performing Teams
Understanding NZS3910 Conditions of Contract

FINAL THOUGHTS



- Potential shortage of Engineers in Local Government in the next five years
- Entire industry needs to focus and work together to ensure this does not happen
- NZIHT training model very efficient and cost effective to assist in this process
- Lets make it clear to youngsters there are many paths to becoming an engineer

THANK YOU

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