



AN AUSTRALIAN GOVERNMENT INITIATIVE

Industry Training Hubs are funded by the Australian Government Department of Education, Skills and Employment

Careers in the Regional Rail and Construction Industry

A collaboration between ACCE, ITH, RPV and Coleman Rail



WEBINARS for Students and Educators!

Learn about careers in the Rail and Construction Industry and hear from current industry professionals

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EDUCATORS:

CAREERS IN THE REGIONAL RAIL AND CONSTRUCTION INDUSTRY WEBINAR

STUDENTS:

CAREERS IN THE REGIONAL RAIL AND CONSTRUCTION INDUSTRY WEBINAR

Introduction

Welcome to the 'Careers in Regional Rail and Construction' workbook, for students in secondary schools. This exciting resource is designed for senior secondary students to explore and find a pathway into this dynamic and growing industry. The workbook highlights the many and varied entry points from secondary school into a sustainable and long term career in rail and construction.

Real life case studies provide a rich resource of careers information for students and parents, providing insights into dynamic jobs that are evolving to meet the needs of future generations.

The Australian Centre for Career Education (ACCE) in collaboration with Industry Training Hub Shepparton, Coleman Rail and Rail Projects Victoria are excited about presenting this new resource to support students, parents and teachers, to help them prepare for the next stage in their career journey.

Consider, explore, plan and enjoy your all- aboard career journey in the regional rail and construction industry!

Bernadette Gigliotti

CEO

The Australian Centre
for Career Education

Acknowledgments

The Australian Centre for Career Education, respectfully acknowledge the Traditional Owners of Country throughout Australia and pay respect to Aboriginal and Torres Strait Islander people as custodians who have cared for this land, and its waters for over 60,000 years.

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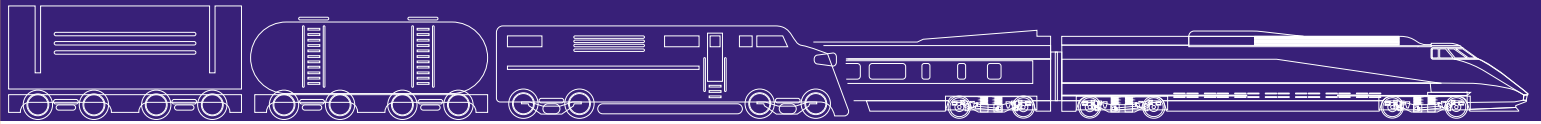
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Careers in the REGIONAL RAIL AND CONSTRUCTION INDUSTRY



Industry Overview

A career in regional rail and construction can be full of opportunities for travel, upskilling, career advancement and learning new skills. There may be some jobs in this industry that you are already familiar with, and there will be others that you are learning about for the first time. As you work through this book and hear from people currently working in regional rail and construction, you will discover that there is much more to this dynamic industry than trains and stations. Communications professionals, project managers, and environmental and sustainability officers are just some of the diverse roles and people needed to keep the industry on track.

What is the Regional Rail and Construction Industry?

“The Australian rail industry is vibrant and diverse and provides numerous career opportunities across a wide range of occupations. It plays a vital role in the transport supply chain and the economic development of Australia.”

– Logistics Training Council

Australia relies heavily on rail for transporting not only people to and from their work, but also stock and goods across the country and on to the international market. This importance is highlighted by the Australian and Victorian Governments investing \$4 billion in the Regional Rail Revival program. This money will be spent to fund vital projects such as the Shepparton Line Upgrade, with 600 jobs being created across this project alone!

This book will help you learn more about career opportunities in the industry across many sectors:

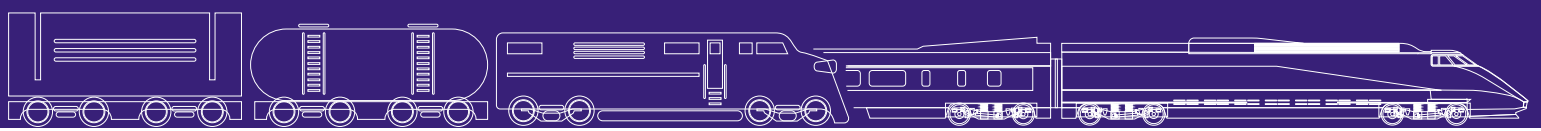
- **Infrastructure** – Track and line work, freight facilities bridges, tunnels, stations
- **Rail Operations** – Keeping a rail network running all day every day
- **Business support** – Supporting operations across all sectors of the industry.

You will also discover the many varied pathways people have taken to arrive at their current position in their career journey, it is almost never a straight line! Study options for a wide range of jobs have been mapped out in this book, including many with VET options or apprenticeships and traineeships.



How will you
start your journey
in the Regional Rail
and Construction
Industry?

Careers in the REGIONAL RAIL AND CONSTRUCTION INDUSTRY



Rail Industry Insights

The rail and construction industry is critical to Australian business. With an estimated annual revenue of \$22.7 billion, the Australian rail sector carries people and commodities over 33,000kms across the country. More than 50,000 people are employed in the industry across 961 companies comprising private and public operators, passenger and freight operators, track owners and managers, manufacturers and suppliers that operate in urban, regional, and rural areas of Australia.

Public infrastructure draws on a range of workers and skills to support delivery from four main infrastructure-based occupational groups: project management professionals; engineers, scientists and architects; structures and civil trades and labour; finishing trades and labour.



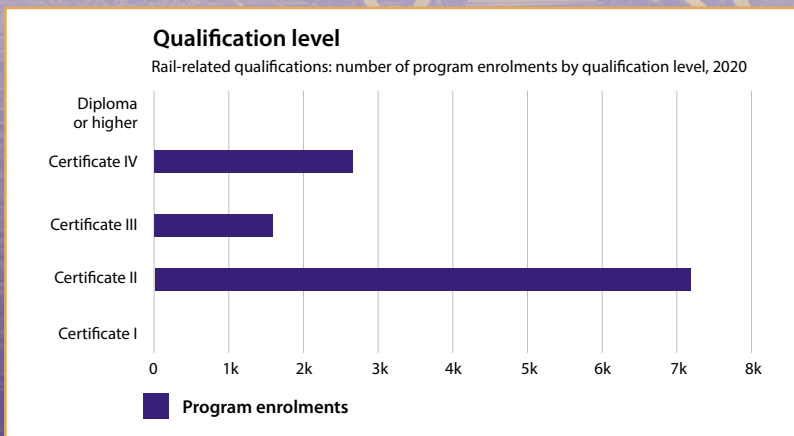
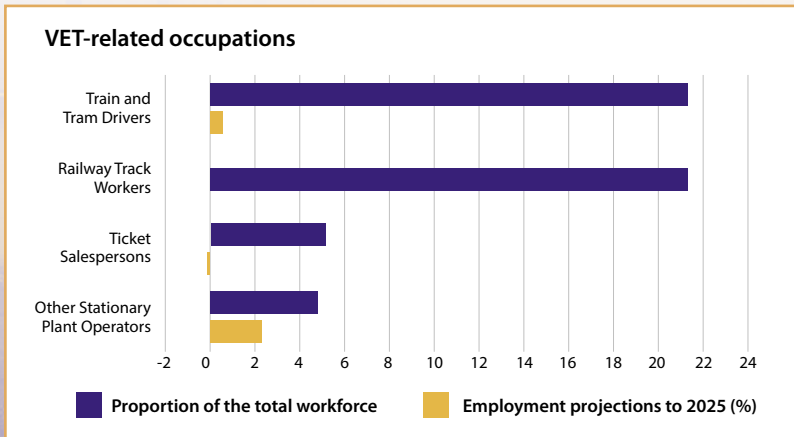
- Gender distribution: 23% female, 77% male.



- In the last 5 years there were 20,000 new jobs created in the Australian rail industry.

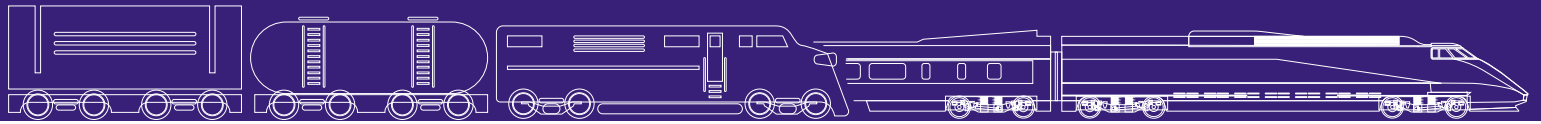


- VET-related occupations: projected employment growth for each occupation to 2025.



JOB SHORTAGES:
Engineers, Educators, Trainers and Assessors, Signalling Technicians, Train Drivers, Track Workers.

Careers in the REGIONAL RAIL AND CONSTRUCTION INDUSTRY



Meet The People



leashya Chapman

Civil Construction Trainee
Protech

Cert III in Civil Construction

https://youtu.be/p6hsy_hjIRE

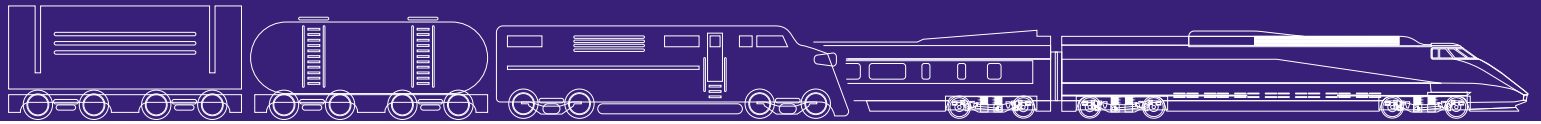
1. Where did leashya's career journey begin?

2. What employability skills might leashya have acquired in her previous work roles that may help her in this industry? You can search for a list of employability skills online.

3. Use www.myskills.gov.au to find providers of leashya's certificate course in your region.



Careers in the REGIONAL RAIL AND CONSTRUCTION INDUSTRY



Meet The People



Raymond Scott-McGee

Civil Construction
Protech

Traineeship

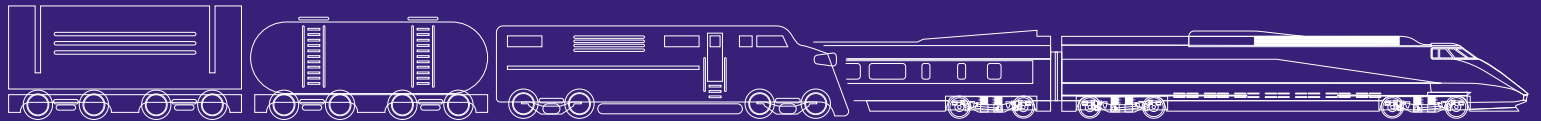
<https://youtu.be/qMoZEgGDCRk>

1. What is Raymond's position and what project is he working on?

2. Use Australian Apprenticeship Pathways to find out the difference between an apprenticeship and a traineeship.



Careers in the REGIONAL RAIL AND CONSTRUCTION INDUSTRY



Meet The People



Jazmin Britt

Site Administrator Trainee
Coleman Rail

Traineeship – Cert IV in Business Administration

<https://youtu.be/B8-TamlatNM>

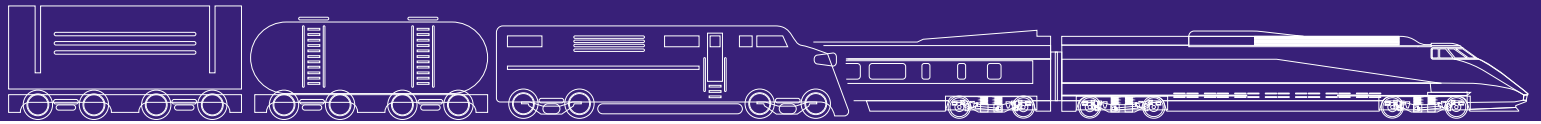
1. What are some of Jazmin's typical daily tasks?

2. What does Jazmin say are the best parts of her job?

3. What advice does Jazmin have for young people starting work?



Careers in the REGIONAL RAIL AND CONSTRUCTION INDUSTRY



Meet The People



Rylea Demerlo

Civil Construction
Protech

Traineeship

<https://youtu.be/3YuRH33miwY>

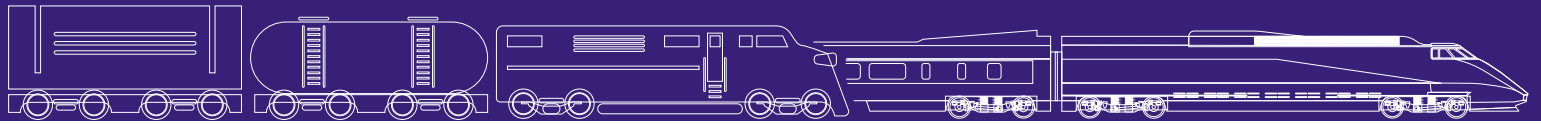
1. What project is Rylea working on as part of her traineeship?

2. Use Victoria's Big Build to find out which stage of the project is completed and what comes next.

3. What are some of the requirements Rylea mentioned for her job?



Careers in the REGIONAL RAIL AND CONSTRUCTION INDUSTRY



Meet The People



Callum Saron
Civil Construction
Protech

Traineeship

<https://youtu.be/Srf1dsHuk2g>

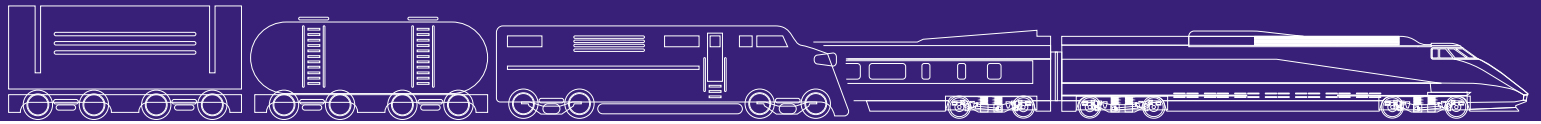
1. What certificate is Callum studying?

2. Use www.myskills.gov.au to find out the average salary for someone who has completed this certificate.

3. What are some of Callum's typical daily tasks?



Careers in the REGIONAL RAIL AND CONSTRUCTION INDUSTRY



Case Study 1



Coral Irvine
Regional Manager
V-Line

Management Diploma Program
Training and Assessment Certificate

I've been working with V/line for 20 years and I've been in my current role for 10 months. I was recommended by my mentor to apply for this current role. But it was also a 'what's next' moment... I had undertaken a job that I was conversant with in a new region and the challenges were limiting.

I went to 6 secondary schools and was a lazy student but I had a lot going on in my life then. At one stage I wanted to be a Prison Officer, but back then you needed to be 25...so I was a bit directionless. After school I applied for a trainee manager role at Kmart and was successful. I moved regularly during that time in my life and this gave me the ability to be able to adjust to different people and locations.

I started my career with V/line as a part time Conductor. I then moved through different roles including a full time Conductor, part time Station Officer, full time safeworking Station Officer, Station Manager, Senior Service Manager, Area Service Manager and now to Regional Manager. I enjoy change and challenges.

Day to day I can be talking to stakeholders, budgeting, leading my team or promoting the region. The role is diverse and on any given day my plans will change and I will adapt to those changes. In my role, we are responsible for all aspects of the customer operations for the region and leading our teams, working towards consistency for the state.

I love that I am in a position to contribute to the future of the region, to promote consistent (fair and equitable) work practices ensuring that everyone is heard and development opportunities are not overlooked. What would I change? I am not sure I would change anything except to say – to sit in the role you have, to constantly question how you view everything, what you can do better, what team members add to your journey and what is happening elsewhere in the state, in the country and globally that might help a process.

In my role it is important to have great communication and curiosity – always questioning “why?”.

There are endless opportunities in public transport - embrace these opportunities as this sector is constantly evolving and adapting. Be bold. Believe in yourself. Be prepared to sit in positions of discomfort at times in your life, it's where your greatest growth and learning comes from.

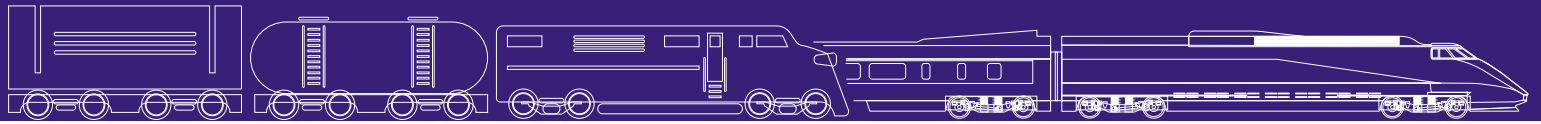
1. What were the career progression steps Coral has taken to get to her current job?

2. What are Coral's day to day duties in her current role?

3. How does Coral see that the many moves she experienced during adolescence helped her?

4. What about Coral's career interests you? Why?

Careers in the REGIONAL RAIL AND CONSTRUCTION INDUSTRY



Case Study 2



Olivia Nesci
Graduate Civil Engineer

Bachelor's Degree in Civil Engineering

I have always been fascinated by, and drawn to, major infrastructure projects that impact our wider community. Being a part of building projects which will change the way people use transport, roads and rail is quite rewarding, and has always excited me.

At school I was a diligent student who worked hard and was quite study focused. When I was in Year 10 I had no idea what I wanted to do and found it a little bit overwhelming. All I knew was I enjoyed studying science and maths in school and I seemed to excel in those subjects. It wasn't until I was encouraged by my maths teacher to participate in engineering related work experience, that I then knew what engineering was. After finishing Year 12, I went straight into a bachelor's degree in engineering.

In my job, I assist senior engineers in resolving issues experienced in the development phase of the Warrnambool Line Upgrade, which have to be solved before construction commences. This project scope involves making changes to upgrade the train track and signalling infrastructure along the line, so that we can run the new VLocity trains on the corridor (to replace the old fleet of trains).

I am most proud of my involvement in the development of the occupation crossings scope. I was responsible for working with V/Line to determine which private crossings should be upgraded, closed and gated; so that we could provide a solution which ensures safety for train drivers and the public using the crossing. Throughout this process I had to collect data on the usage of crossings, and work with landowners, train drivers and other engineers to determine which solution is most appropriate. Since we are now introducing new trains which run at higher speeds, safety risks to the public are increased and so we had to assess how we were going to eliminate these new risks.

Essential skills for my role are: Thinking creatively, Strengths in maths and science, being able to problem solve, analytical skills, communication skills, show initiative and the ability to adapt to and respond to change quickly.

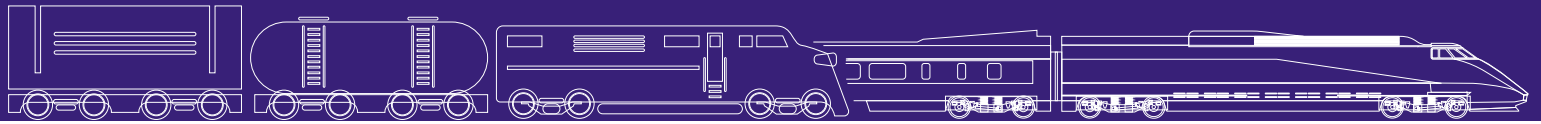
I suggest that you try different things, be willing to learn and get undergraduate experience while you are still studying at uni to help you work out what stream of engineering you can visualise yourself working in – engineering is a very broad and diverse field with a vast variety of roles; from working on site to an office job, there are many opportunities.

1. How did Olivia become aware of engineering as an occupation?

2. What skills are necessary for Olivia's job?

3. What is Olivia most proud of in her current role?

4. What is your understanding of what an engineer does?



Case Study 3



Fariha Chowdhury
Civil Engineering Cadet
Rail Projects Victoria

Civil Engineering Cadet

Introducing Fariha, a Civil Engineering Cadet working on the Bendigo and Echuca Line Upgrade.

A working day for Fariha can entail updating project materials, preparing report updates, attending meetings, and working with various stakeholders. These roles have contributed to her developing a deeper understanding of the various stages of rail infrastructure projects.

Fariha's career ambitions in the construction and infrastructure industry include gaining experience across numerous rail projects, civil engineering disciplines and progressing to leadership roles, in addition to her long-term goal to become an entrepreneur.

As a woman of Asian descent, Fariha is passionate about breaking down social stigmas, and wants to be a change catalyst of negative misconceptions associated with people working in the construction industry to help them achieve their ambitions, regardless of gender or race.

"I want to create a positive impact and empower women. The future of women in the industry is optimistic and every day, my belief gets stronger that I can do more, add value and continue to explore the field of infrastructure development as an engineer".

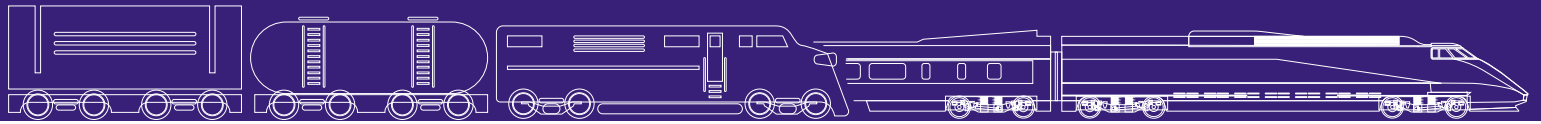
1. What are the day-to-day activities involved in Fariha's role?

2. What are Fariha's work goals and ambitions?

3. What types of skills do you think would be required for Fariha's job?

4. See if you can find other types of engineering cadetships available to you in rail and construction.

Careers in the REGIONAL RAIL AND CONSTRUCTION INDUSTRY



Case Study 4



Hamse Mohamed
Safety Trainee
Protech for Coleman Rail

I applied for this job because I've always been interested to one day give safety a go. I've been working in this role for 11 months now. I don't have any formal qualifications, I completed year 12.

Day to day my duties include:

- Investigations of incidents on site
- weekly site safety walks
- Sub-contractor audits on site
- Report writing
- Updating safety dashboard
- Distributing PPE on site.

School was great for me and I was a determined student. From Year 10, I wanted to be an electrician, as I've always been interested in learning about conduction. I previously worked in the civil construction industry and that was the main reason that led me to work in the role I am in right now.

I love the support I'm getting from the team and the company, I feel very well supported in my role. I've finally found a job that I enjoy and can wake up happy to go to work. The Rail industry is a great industry, there is a lot of opportunity for people looking for a career and various types of roles.

The skills that are important for my role are: organisation, communication and teamwork.

Safety is very important in a construction site. All the procedures and rules we have are not to annoy people, they are there to make sure workers up on site go home to their loved ones and to me it is the best job in the world. In the future I'd like to become a senior safety adviser.

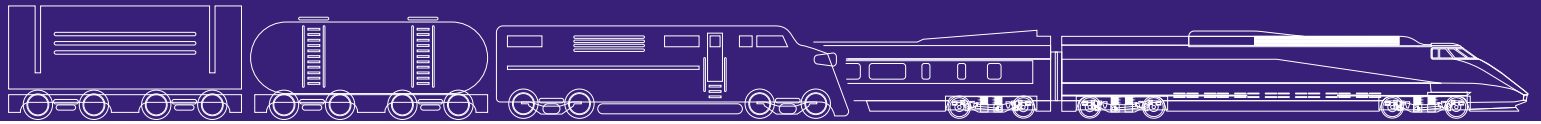
1. Why is safety so important in Hamse's opinion?

2. What qualifications does Hamse have?

3. What interest sparked Hamse's career direction?

4. Can you imagine yourself in a safety officer role? Why or why not?

Careers in the REGIONAL RAIL AND CONSTRUCTION INDUSTRY



Case Study 5



Darren Laphorne

Regional Manager - North
V/Line

Commerce/Business Degree

I wasn't the smartest or best performing student at school. It took me 15 years following high school to really commit and decide what profession I wanted to focus on. Sport was by far my best subject. In Year 10, I wanted to be a professional cyclist or work in business.

I followed my passion and became a professional athlete (cycling). I completed 1 year at Uni (commerce/business degree) before I had the opportunity to ride for a German professional cycling team. I deferred my Uni degree and left for Europe where I spent the next 12 years.

Retiring at 32 years old, I applied for a position at V/Line as I always had an interest in regional based transport/business. I was successful for a Station Assistant role and have pursued all opportunities that opened up to me within V/Line.

I hold an International Baccalaureate and multiple diplomas and short course certificates that relate to my current role which V/Line has supported me to complete.

I applied for my current role to gain experience in a number of roles at V/Line including acting in the role for 12 months when we were short staffed. I've been in this role for 6 years and I was previously a Services Manager, Conductor and Station officer. Day to day I am leading a team of 80 team members, focusing on regional strategy, finance, operations and planning, customer service, risk assessments, committee chairing.

My major responsibilities are:

- Safety of my team and V/Line customers across Northern Victoria
- Operating V/Line services as efficiently and customer focused as possible
- Creating an inclusive and motivated workplace culture where team members are encouraged to contribute to ideas and initiatives.

I love the impact my position has on contributing to the public, our customers and my team, and engaging with the community. Every day brings new and unexpected challenges and I like that this job is regionally based in Bendigo. The skills needed for this role are: reliability, resilience, optimism, being a team player, a calm demeanour and motivation.

In this industry there are amazing opportunities to be involved in a growing industry. There are a huge variety of jobs available – driving, conductor, asset/ganger, management, customer experience roles. There's something for everyone!

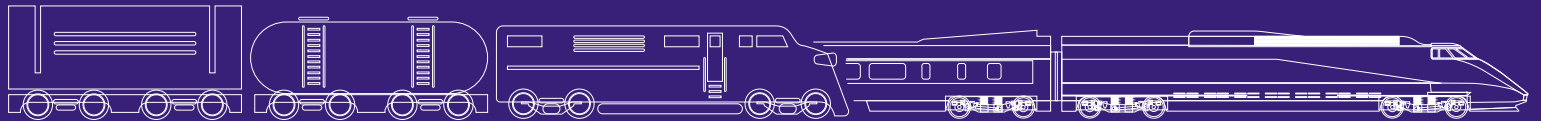
1. What did Darren do instead of finishing his commerce degree?

2. What is the International Baccalaureate?

3. What skills does Darren need for his current role?

4. Can you imagine leading a team of 80 people? Write an example of a time when you may have led a team of people.

Careers in the REGIONAL RAIL AND CONSTRUCTION INDUSTRY



What Subjects Should I Consider?

These subjects, spanning Years 7-12, may be useful if considering a career in the regional rail and construction industry:

Year Level / Learning Area	7 - 10	VCE	VCE VET
English	English	English Language Foundation English EAL	Applied Language
Mathematics	Mathematics	Foundation, Further and General Mathematics Mathematical Methods and Specialist Mathematics	
Science	Science	Environmental Science	
Technologies	Design and Technologies Digital Technologies	Product Design and Technology Systems Engineering	Automotive Building and Construction Cisco Civil Infrastructure Electrical Industry Engineering Plumbing
Humanities	Geography	Geography	Community Service
Economics	Economics and Business	Accounting Business Management Economics Industry and Enterprise Legal Studies	Business Small Business

VET subjects – there is a range of VET subjects related to trades like plumbing, electrical, engineering, project management, and more that could be applied to a career in the rail industry.

Find out more here: <https://www.vcaa.vic.edu.au/curriculum/vet/vce-vet-programs/Pages/Index.aspx>



Careers in the REGIONAL RAIL AND CONSTRUCTION INDUSTRY



Rail Industry Study Options / Jobs Table

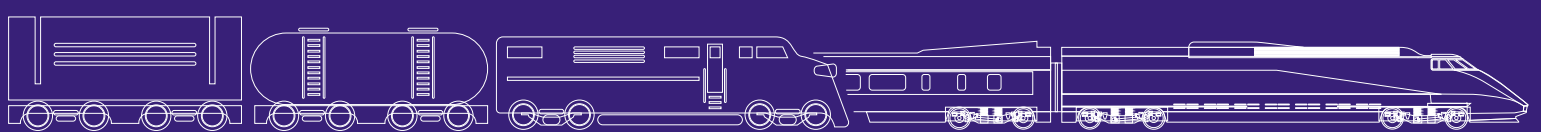
The following table lists jobs that have been discussed throughout this workbook and shows some of the possible pathways and qualifications that are available. Some jobs will require a bachelor's degree or higher qualification, and others will require certificate qualifications or apprenticeships and traineeships. These are only some of the study options available to you. There are many other courses and combinations to explore! Remember to speak with your school's Career Practitioner or Careers Advisor to find out what could work best for you.

Click through the links and take a look at some of the courses available!

Click in the fields to learn more		IN SCHOOL	POST SECONDARY				
Job	Description	VET	Cert III	Cert IV	Diploma	Adv Diploma	Degree
Civil Construction – Works Execution	<u>Perform routine tasks in erecting and repairing structures and facilities on building and construction sites.</u>	<u>Cert II in Civil Construction</u>	<u>Certificate III in Civil Construction</u>	<u>Certificate IV in Civil Construction</u>			
Construction Project Managers	<u>Construction Project Managers manage civil engineering and building projects.</u>	<u>Certificate II in Construction</u>	<u>Certificate III in Civil Construction</u>	<u>Certificate IV in Building and Construction</u>	<u>Diploma of Building and Construction (Management)</u>	<u>Advanced Diploma of Building and Construction (Management)</u>	Bachelor of Construction Management
Communications Advisor (Advertising/PR)	<u>Advertising, Public Relations and Sales Managers plan, organise, direct, control and coordinate advertising, public relations, sales and marketing activities within organisations.</u>	<u>Certificate II in Workplace Skills</u>	<u>Certificate III in Business</u>	<u>Certificate IV in Marketing and Communication</u>	<u>Diploma of Marketing and Communication</u>	<u>Advanced Diploma of Marketing and Communication</u>	Bachelor of Marketing and Media Communications
Stations and Facility Design Professionals (Civil Engineering Professionals)	<u>Civil Engineering Professionals design, plan, organise and oversee the construction of civil engineering projects such as railways and stations.</u>	<u>Certificate II in Civil Construction</u>	<u>Certificate III in Civil Construction</u>	<u>Certificate IV in Civil Construction Design</u>	<u>Diploma of Civil Construction Design</u>	<u>Advanced Diploma of Civil and Structural Engineering</u>	Bachelor of Civil Engineering

Click in the fields to learn more		IN SCHOOL	POST SECONDARY				
Job	Description	VET	Cert III	Cert IV	Diploma	Adv Diploma	Degree
Welder	<u>Welding Trades Workers cut, shape, join and repair metal components of iron and steel structures, boilers, trains and railways.</u>	<u>Certificate II in Engineering</u>	<u>Certificate III in Engineering – Fabrication Trade</u>	<u>Certificate IV in Engineering</u>	<u>Diploma of Engineering – Advanced Trade</u>		
Occupational & Environmental Health Professionals	<u>Develop, implement and evaluate policies and programs to monitor environmental health and occupational health and safety and related legislation.</u>	<u>Certificate II in Workplace Skills</u>	<u>Certificate III in Work Health and Safety</u>	<u>Certificate IV in Work Health and Safety</u>	<u>Diploma of Work Health and Safety</u>	<u>Advanced Diploma of Work Health and Safety</u>	Bachelor of Science (Health, Safety and Environment)/ Bachelor of Environmental and Occupational Health and Safety
Charter Bus Driver	<u>Bus and Coach Drivers drive buses and coaches to transport passengers over established and special routes.</u>	<u>Certificate II in Driving Operations</u>	<u>Certificate III in Driving Operations</u>	<u>Certificate IV in Specialist Driving Operations</u>			
Train Drivers	<u>Train Drivers drive trains to transport passengers and freight on railways.</u>	<u>Certificate II in Rail Track Vehicle Driving</u>	<u>Certificate III in Terminal Train Driving</u>	<u>Certificate IV in Train Driving</u>			
Railway Signal Operators	<u>Railway Signal Operators control the movement of trains, and assemble and disassemble trains within a marshalling yard.</u>	<u>Certificate II in Rail Infrastructure</u>	<u>Certificate III in Mechanical Rail Signalling</u>	<u>Certificate IV in Electrical Rail Signalling</u>			
Railways Assistants	<u>Assist with operating and maintaining facilities at railway stations by updating train times and destinations, collecting and checking passenger tickets, giving and cleaning station facilities.</u>	<u>Certificate II in Rail Infrastructure</u>	<u>Certificate III in Rail Infrastructure</u>	<u>Certificate IV in Business</u>	<u>Diploma of Business</u>		

Careers in the REGIONAL RAIL AND CONSTRUCTION INDUSTRY



Labour Market Information Research Activity

Now that you have seen some of the jobs and qualifications available in the Regional Rail Industry, complete research of your own to discover more about the jobs that sound interesting to you.

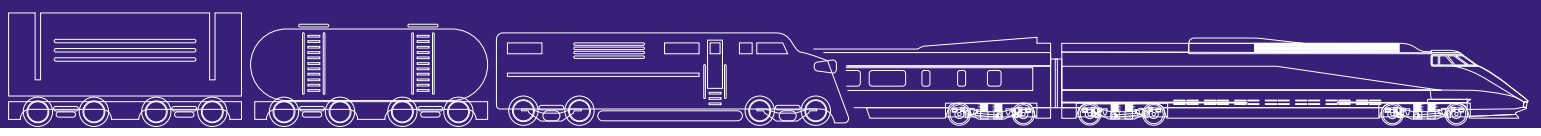
Choose three jobs and fill in the gaps below by visiting the labour market information sites used in the 'Study Options and Jobs Table'.

Some of the information may not be available for all categories using the sites below, but you can research online and see if another reputable site has the information you need.

- <https://www.yourcareer.gov.au>
- <https://labourmarketinsights.gov.au>
- <https://www.myskills.gov.au/>

Job	Weekly Wage	Future Growth	Skills Level Rating	Common Tasks/Roles	Skills employers are looking for	Average Age
EXAMPLE <i>Communications Advisor (Advertising/PR)</i>	\$2,548	4.4%	Very high skill	<ul style="list-style-type: none"> • Plan and organise publicity campaigns • Analyse public opinion research • Organise publicity events 	<ul style="list-style-type: none"> • Communication Skills • Writing • Organisational Skills • Social Media Management • Building Relationships • Editing 	34

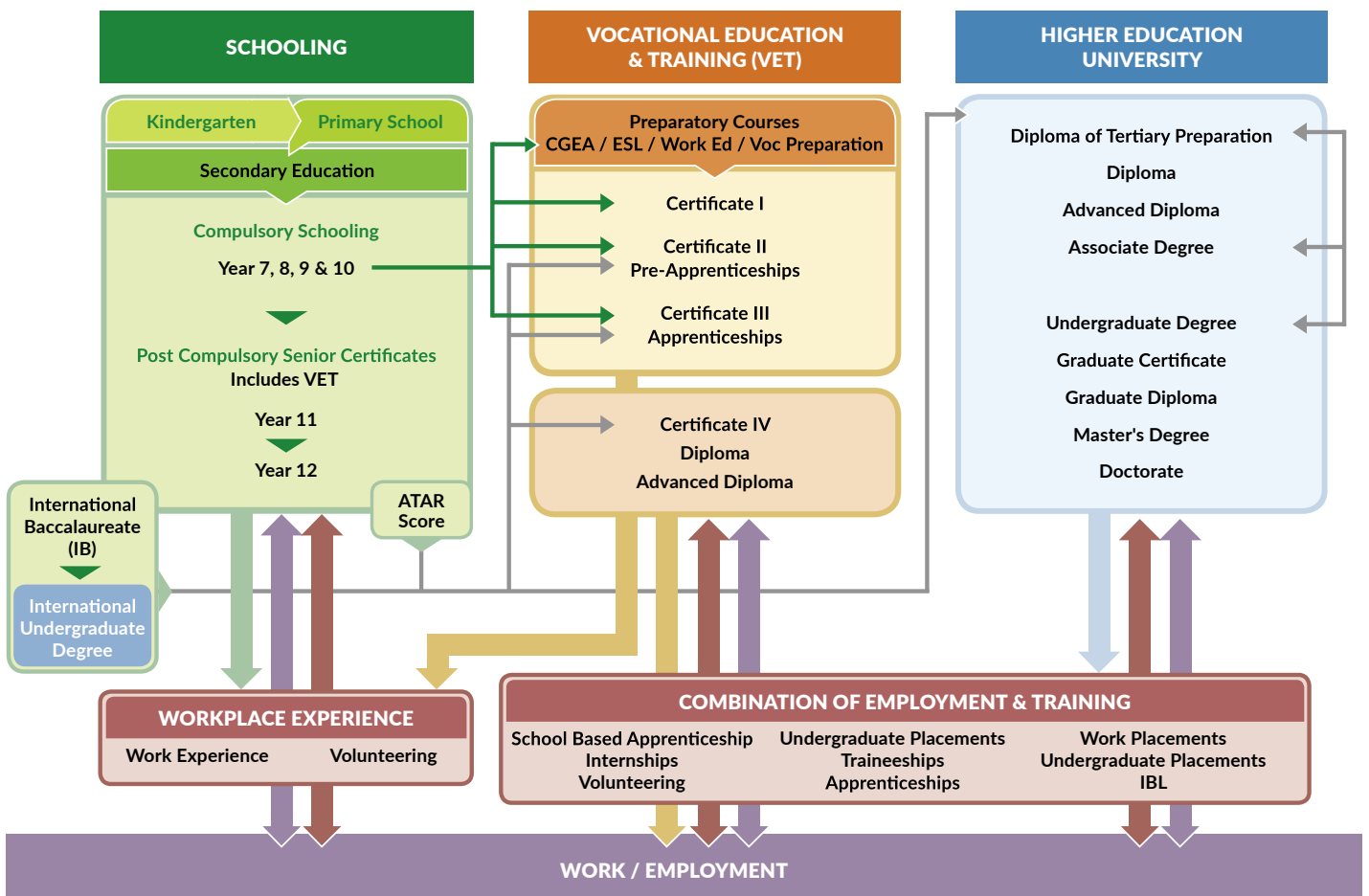
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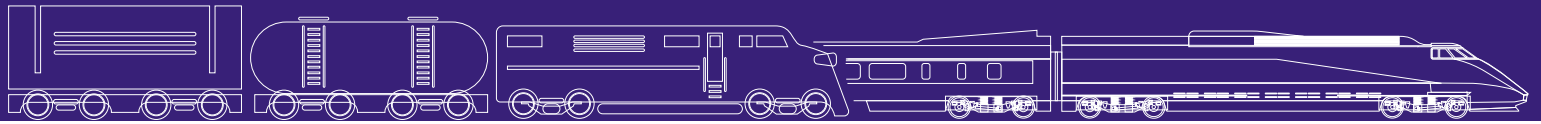
PATHWAYS PLANNER

There are many pathways into a job or career you might like, including in the rail and construction industry. Use the diagram below to gain an understanding of how you can navigate a pathway from school into study or training, or acquire the skills you need to gain employment and sustain work across your lifetime.

PATHWAY FOR EDUCATION, TRAINING & EMPLOYMENT



Careers in the REGIONAL RAIL AND CONSTRUCTION INDUSTRY



Pathway Planning Activity

What are the key messages regarding the Rail and Construction Industry you have learned so far through this workbook?
Take a few minutes to reflect on your learnings and record any new information gathered.

What are three things you have learnt regarding this industry that you didn't know before?

Name 3 of the key skills required to work in this industry

Do you have these skills now?

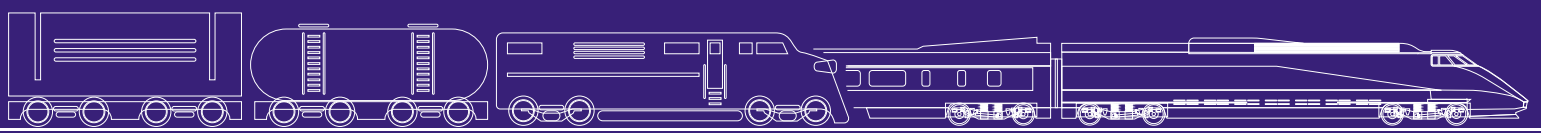
- Yes, I have ALL of these skills!*
 Yes, I have some of these skills (List the skills you have)

No, but I would like to learn these skills (List the skills you would like to learn)

What subjects do I need to learn these skills?



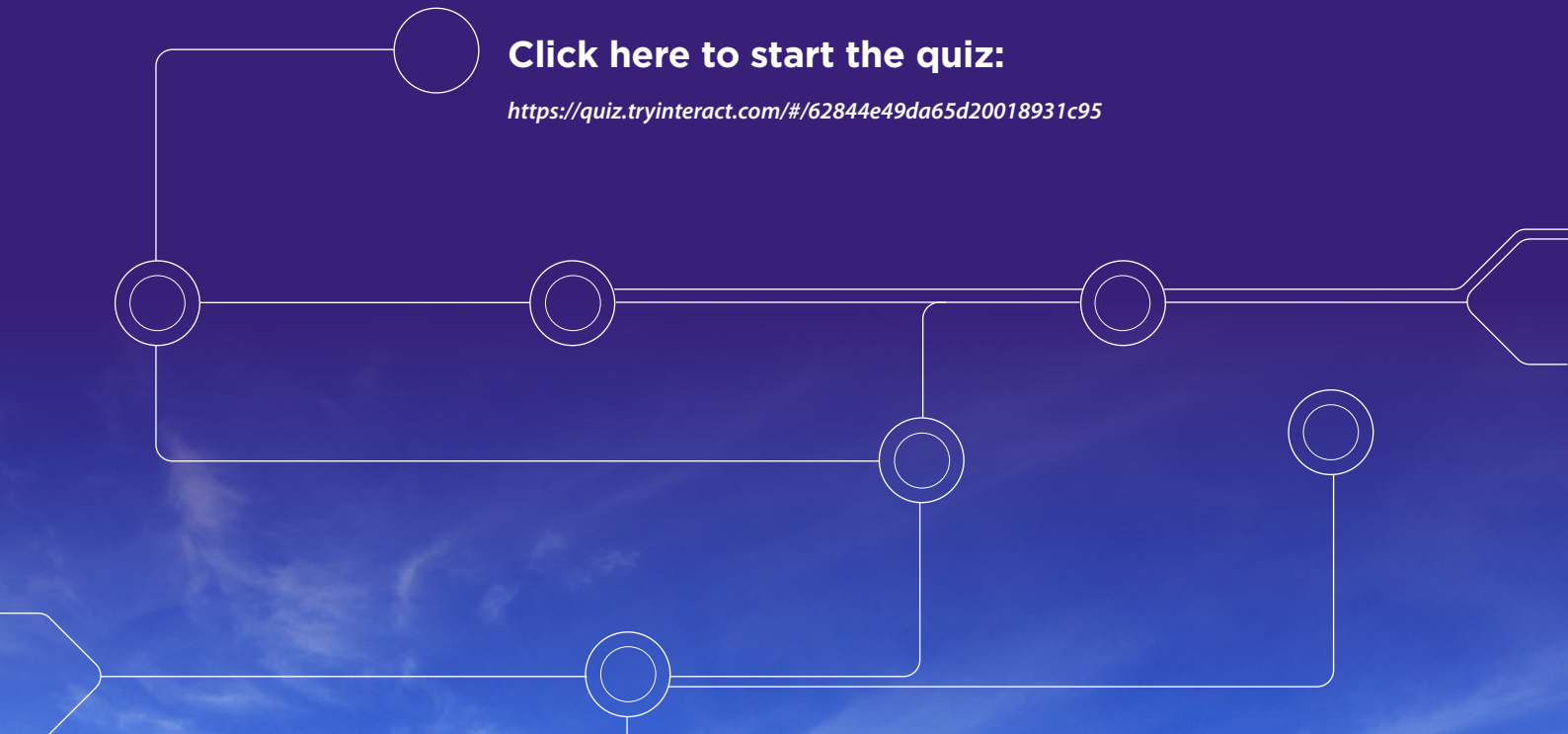
Careers in the REGIONAL RAIL AND CONSTRUCTION INDUSTRY

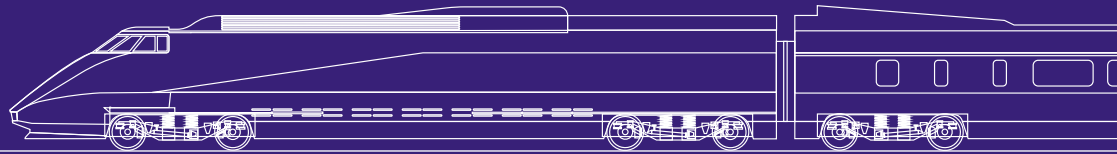
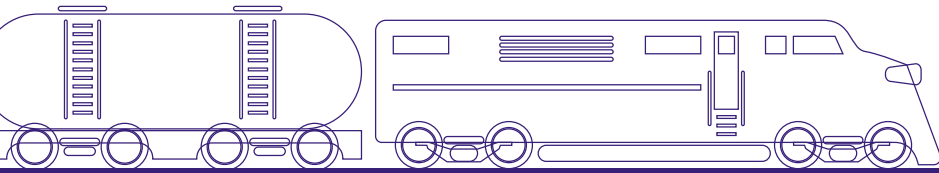


Online Interactive Quiz

Click here to start the quiz:

<https://quiz.tryinteract.com/#/62844e49da65d20018931c95>





**Australian Centre
for Career Education**

Australian Centre for Career Education
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