

INSIGHT INTO ROLLINGSTOCK ENGINEERING COURSE 2021

RTSA

Sydney, NSW

Day 1: 12:00-5:00pm (AEST) 29th April 2021

Day 2: 8:30-5:00pm (AEST) 30th April 2021

The Railway Technical Society of Australasia (RTSA) will conduct the Insight into Rollingstock Engineering course in 2021.

This 1.5-day introductory course will provide an insight into the principles used in the design, manufacture and maintenance of railway rollingstock including locomotives, passenger cars, multiple unit trains and freight wagons. Presenters are Engineering Consultants and members of the RTSA. This is a great opportunity to learn direct from experienced engineers who have each worked in the rail industry for over 40 years.

This course is designed for those new to the industry and those required to liaise with rail engineers involved with rollingstock acquisition, operation and whole of life support projects as well as the interface between each of the operating systems.

This course was previously offered jointly with the Australian Railway Association (ARA); employees of ARA members and RTSA members are eligible for the member rate.

Course Speakers

John Watsford BSc (Elec Eng), FIE Aust, Life Member RTSA, Engineering Consultant

Ian Rossow BTech Elect, MIE Aust, Engineering Consultant

Colin Butcher OAM, BSC (Mech Eng), FIE Aust, Engineering Consultant



Course Program

Type of Rollingstock

Why use rail; Gauge; Locomotives; Passenger; Freight

Rollingstock Dynamics – Adhesion

Wheel/Rail Interface; Tractive Effort; Design

Bogies

Springs; Powered Bogies; Trailer Bogies; Other – Rack, Tilting; Wheelsets

Diesel Elec Loco Design – Engines – AC/DC – Auxiliaries

Selection of loco type; Traction and Control Systems; Auxiliaries; Cabs

Freight Wagons

Types; Dimensions and capacities; Materials; Couplers

Passenger Rollingstock – Types

Service speed; Loco hauled; Push-pull; EMU; DMU; Single-Double deck

Passenger Rollingstock – Design

Body construction; Definitions; Passenger areas; Bogie type; Fire safety; Tunnel operation

Passenger Rollingstock – Devices

Types of motor drive; Diesel; Control systems

Braking Systems

Concepts; Types; Air System; Control Equipment; Performance

Railway Safety

Rail Safety Act; RISSB Codes of Practice; OH&S; Effects of Operation; Safeworking

Management of Risk

Risk Management; Mitigation; Registration of rollingstock

Maintenance

Whole of Life Asset Management; Maintenance planning; Maintenance strategies

Support Services

Facilities; Staffing; Inventory control

Interfaces

Wheel/Race Interface; Signalling; Supply; Environmental; Communications; Train Crew Interface

Click the link to register or for more information, visit our website or contact us by phone or email:

Register: <https://cvent.me/xkIXqn>

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