Vacation Work Opportunities – Railway Technical Society of Australasia (RTSA) NSW University Challenge 2018

The RTSA NSW University Challenge 2018 is a rail engineering competition hosted by the NSW Chapter of the Railway Technical Society of Australasia (RTSA) for university engineering students. Teams are required to submit a project proposal for a hypothetical rail project. Winners will be offered an interview for summer vacation work at a prominent company in the rail industry (see overleaf).

Students must register their teams of either three (3) or four (4) members by completing the online registration form for each team member by clicking here or making a request for the form to rtsaunichallenge@rtsa.com.au by 11PM on 28th June 2018. In the online registration form, students will be required to apply to become a member of both the RTSA and Engineers Australia if they are not already members (free to join). The competition will run for 4 weeks commencing on 30th June 2018.

Who Should Apply?

Students from a university in New South Wales who are studying an engineering degree of any discipline and in their penultimate or final year of study are encouraged to apply.

Why is the Rail Industry Important?

The rail industry provides a significant contribution to the Australian economy, in the form of employment and transport services for passengers, agriculture, resources and freight. Noteworthy statistics of the rail industry are:

- In 2016 the contribution of the rail industry to GDP was $26 billion¹.
- The rail industry directly and indirectly supports over 140,000 jobs Australia wide¹.
- In 2015-16, there were 912 million urban passenger rail journeys in Australia².
- The Sydney Trains network currently carries 340 million passengers annually³.
- In 2015-16, the Australian rail network carried over 1.34 billion tonnes of freight².
- Over the next 5 years, estimated expenditure on major rail projects is over $45 billion¹.

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What Are the Career Prospects in Rail Engineering?

Working for Owners and Operators
Identify and establish commercial needs to develop business cases and budgets. Produce concept designs to validate optioneering. Project manage infrastructure and maintenance works. Maintain and improve standards and practices.

Working for Designers and Consultants
Identify inputs, specifications and design criteria for safe and efficient operations and maintenance. Solve problems and identify practical solutions. Provide design for rolling stock, and rail infrastructure including track, signalling systems, structures, stations and electrification systems. Validate and verify designs and solutions.

Working for Contractors and Constructors
Deliver quality and cost effective construction on time and to budget. Project manage rail construction works. Provide ongoing maintenance and replacement advice and works.

Who are the Challenge Partners and Sponsors?

Gold Challenge Partner

NSW Government

Transport

Challenge Sponsors

ARUP

SNC-LAVALIN

ATKINS

Member of the SNC-Lavalin Group

ALSTOM

Downer

Relationships creating success

What is the RTSA?

The Railway Technical Society of Australasia (RTSA) is a joint Technical Society of Engineers Australia and Engineering New Zealand, formed to further the interests of the rail industry at large and its individual participants. The RTSA is a non-profit organisation that was established in 1997 for the purpose of promoting the co-operation of academic, industrial, commercial and governmental organizations in relation to the practice and advancement of rail technology and management in Australasia.

The RTSA arranges an on-going program of events both nationally and regionally. These events include major initiatives such as the biennial Conference on Railway Excellence (CORE) and international study tours; scholarships and awards, as well as technical meetings, discussion groups, seminars, workshops, lectures, site visits and networking events. Membership is free for students. For more information, and to register, please visit http://www.rtsa.com.au/. Please direct any enquiries to rtsaunichallenge@rtsa.com.au.