Registration:

Course registration is to be performed on ERP of IIT Kharagpur website link:

https://erp.iitkgp.ac.in/CEP/courses.htm

Registration Fee:

** INR: 45,000 only (For Indian Nationals)

** USD: 1,200 only (For Foreign Nationals)

**Limited Seats: 30 (Thirty only)

This fee is inclusive of GST (18%).

The course fee can be paid online through payment gateway. Details will be sent on successful shortlisting for registrations.

Registration fee can also be paid in favor of "CEP-STC, IIT Kharagpur" with Coordinator's permission.

Accommodation:

The accommodation will be provided to participants in our guest house on payment basis.

For more details, please contact us.

<u>Address for Correspondence</u>:

Prof. Neeraj Kumar Goyal (Coordinator)

Associate Professor

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Dr. Ajeet Kumar Pandey (Co-coordinator)

System Assurance Expert Atkins, Dubai, UAE

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Participating Organizations (Earlier Editions):

- AECOM India Pvt. Ltd.
- Alstom Transportation
- Atkins, Bangalore
- Bangalore Metro Rail Corporation
- Bombardier Aerospace, Bangalore
- Bureau Veritas
- Central Electronics Limited
- Dedicated Freight Corridor Corporation
- DB International GmBH (Kochi Metro Rail Project)
- Delhi Metro Rail Corporation Limited, Delhi
- DNV GL Business Assurance India Private Limited
- Dubai Metro
- EXPOLINK ROUTE 2020
- FCC Riyadh Metro
- GG Tronix
- Geometric Global
- Hyderabad Metro Rail Ltd
- Indian Railways
- Kochi Metro Rail Ltd,
- Keolis Hyderabad Metro Rail Transit System
- L&T Construction Transportation Infrastructure IC
- L &T Metro Rail
- L&T Technology Services Ltd
- Louis Berger
- Maharashtra Metro Rail Corporation, Nagpur
- MEGA Company Ltd., Gandhinagar
- Metro One Operation
- Motorola Solutions India
- Mottmac Donald India
- Mumbai Metro Rail Corporation Ltd
- National High Speed Rail Corporation Ltd
- RAMPED (Riyadh Advanced Metro Package Execution & Delivery)
- Rapid Metro Gurgaon South Limited
- Rail Vikas Nigam Limited
- RITES Ltd.
- QDVC (Qatari Diar and VINCI Construction)
- Saudi Arabian Parsons Limited, Riyadh
- Saudi Railway Company
- Scomi Engineering Bhd. Mumbai Monorail
- Systra MVA Consulting
- Siemens, Riyadh
- Shimizu Corp., Singapur
- Thyssenkrupp Elevator Saudi Ltd., Riyadh
- TVM Signalling and Transportation System
- Walmart

A Short-term Course on RAMS for Railway Systems



July 6 - 10, 2020



Organised By :

Subir Chowdhury School of Quality and Reliability, IIT Kharagpur, WB, INDIA

About Subir Chowdhury School of Quality and Reliability, IIT Kharagpur

IIT Kharagpur is the largest technical institution in India and gets ranked among best institutions in the country imparting technical education and research. The Subir Chowdhury School of Quality and Reliability was formerly known as Reliability Engineering Centre, which came into existence in 1983. The school offers M.Tech, MS and PhD degrees in Quality and Reliability Engineering. Besides, the school is actively engaged in sponsored research and offers consultancy services to various public and private organizations.

Brief of the Programme

Earlier Courses:

The first, second, third, fourth, fifth and sixth short term programs on RAMS for Railway Systems were conducted during July 21-25, 2014; July 27-31, 2015; July 11-15, 2016; July 10-14, 2017; July 9-13, 2018; and July 8-12, 2019. The programs received good response from industries in terms of participation and on completion of the course the feedbacks were highly positive. Based on the feedbacks and multiple requests received, the program is proudly being offered again. We look forward to benefit railways authorities and rail support industries through bringing awareness about RAMS concepts and provide basic training in these concepts.

Who Should Attend?

Practicing Professionals, Engineers and Managers in the fields of design, development, consulting, manufacturing, audit, operations, maintenance, and QA/QC in the rail or metro rail industry

Industry Problem Discussions

If your organization or project is facing any challenge or problem related to RAMS, please feel free to write to us in the form below. This can be used during the program for discussion and resolution.

Name:						
Organization:						
Problem Statement:						

Program Coordinators:

Coordinator: Prof. Neeraj Kumar Goyal

Associate Professor

Subir Chowdhury School of Quality and Reliability,

IIT Kharagpur

Co-coordinator: Dr. Ajeet Kumar Pandey

System Assurance Expert Atkins, Dubai, UAE

Faculty:

The program is designed and delivered by experts with years of experience in System Assurance & RAMS immersed on railway industries with cross-functional domain knowledge of transportation sectors. Almost all faculty members are currently associated with the industry in a consulting role.

Program Contents:

- Introduction to System Assurance & RAMS,
- RAMS Parameters & Reliability Prediction
- Accelerated Life Testing
- Failure Data Analysis
- Failure Mode Effects and Criticality Analysis
- Fault Tree Analysis
- System Reliability Modelling
- Apportionment of RAM Parameters
- Basics of V&V and Software Reliability
- Basics of Functional Safety: Hazard, Risk, Risk
 Matrix, Risk Acceptance Principle and Criteria
- Safety Analysis & Management: PHA, SHA, IHA, O&SHA, Hazard Log, Safety Case
- Concept of THR & SIL
- Railway RAMS Standards EN 50126 (IEC 62278), EN 50128 (IEC 62279) and EN 50129 (IEC 62425)
- RAMS Documentation
- RAM and Safety Demonstration during O&M
- New Trends and Technologies