About the Institute

Sant Longowal Institute of Engineering and Technology (SLIET), Deemed to be University, has been established and funded by MoE, Govt. of India in1991 to provide technical education in emerging areas of engineering and technology. The institute caters to the technical manpower requirements at various levels by adopting a concept of a modular system in imparting professional education with an emphasis on practical training in the industry. The study programs include various courses at Certificate, Diploma, B.E. M.Tech. and Ph.D. levels in different branches of engineering and technology. The institute has a sprawling area of 451 acres surrounded by lush green land.

INSTITUTE VISION

SLIET shall strive to act as an international podium for the development and transfer of technical competence in academics through formal and non-formal education, entrepreneurship, and research to meet the changing need of society.

DEPARTMENT OF CHEMICAL ENGINEERING

The Department of Chemical Engineering SLIET, Longowal has been conceived for the creation of technically competent manpower for imparting the technical education at the levels of Diploma (Chemical Technology), Undergraduate (B.E. in Chemical Engineering), Post-graduate (M. Tech. in Chemical Engineering), and Ph.D. in Chemical Engineering & allied fields. The department has all core labs of Chemical Engineering at ICD, UG & PG level. All labs are upgraded to fully functional for multi-usage purposes. Well-equipped research labs cater to the needs of full time and part time research scholars. Fully functional labs in the fields of Chemical Engineering & allied technologies are serving the special need of industries in terms of consultancies and special interests of students to undertake projects & research work.

ABOUT THE PROGRAMME

One-week Faculty Development Programme (FDP) cum Short Term Training Programme (STTP) on **Industrial safety: Tools and Techniques for Risk** Identification **and Assessment 'IS-RIA-2025'** in Hybrid Mode from 7th July to 11th July 2025. The aim of the FDP cum STTP is to provide in-depth knowledge of, key concepts, terminologies, and safety quantification, Hazard identification techniques (e.g., HAZOP, FMEA, Fuzzy Logic etc.), Fault tree and event tree analysis, risk assessment (Qualitative and quantitative), Safety vs reliability, Systems safety quantification, Human error analysis and safety OSHAS 18001, Case Studies etc.

The Faculty, Researchers & students (UG-PG) can get the benefit of attending the said FDP cum STTP by interacting with the leading researchers and technologists and benefit from their vast experience in the area.

BACKGROUND

In today's complex industrial landscape, safety is not just a regulatory requirement—it is an operational imperative. With increasing technological sophistication and system integration across sectors, the need for a structured and scientific approach to safety management has never been more critical. Faculty members and technical professionals must be equipped with advanced tools, methodologies, and frameworks to effectively analyze, design, and manage safety within engineering systems. This FDP cum STTP is designed to bridge the knowledge gap and build robust capabilities in engineering safety systems. The program aims to deliver in-depth exposure to the essential concepts, terminologies, and contemporary practices in system safety and risk management. It brings into focus a range of proven hazard identification techniques such as Hazard and Operability Study (HAZOP), Failure Mode and Effects Analysis (FMEA), and modern approaches like fuzzy logic-based assessment. Furthermore, the program will be enriched with real-world case studies that illustrate the application of theoretical principles to practical engineering challenges,

enabling participants to gain a comprehensive and applied understanding of system safety.

PROGRAM SPEAKERS

The speakers will be distinguished faculty, research and industry persons from National Lobour Institute, IIT's, NIT's, CFTI's & other reputed institutions.

COURSE CONTENTS

Key Concepts and Terminologies: Hazard, Risk, Safety, Accidents, Incidents Hierarchy of Controls, Safety Quantification

Hazard Identification Techniques: HAZOP, FMEA, Fuzzy Logic based Methods

Fault and Event Tree Analysis: Fault Tree Analysis, Event Tree Analysis

Risk Assessment: Qualitative Risk assessment, Quantitative Risk assessment

Safety and Reliability: Safety Audit, Reliability Analysis, Human error analysis and safety

Application of CFD: Modeling and CFD simulation of different safety systems.

Case Study: Case Studies on Safety Audit, HAZOP, Risk Assessment etc.

Patron: Prof. Mani Kant Paswan, Director
Co-Patron: Prof. A. S. Shahi (Dean Academics)

Conveners: Prof. H R Ghatak (HOD, CHE)

Coordinators: Dr. Amit Rai (A.P CHE)
Dr. Nikhil Prakash (AsP CHE)

Faculty Development Programme
Cum Short Term Training Programme
(Hybrid Mode)

ON

Industrial safety: Tools and Techniques for Risk Identification and Assessment 'IS-RIA-2025'

(July 07- July 11, 2025)

ORGANIZED BY

Department of Chemical Engineering

Sant Longowal Institute of Engineering & Technology

(Deemed to be University under MoE, Govt. of India)

Longowal, Distt. Sangrur-148106 Punjab, India

ELIGIBILITY

This interdisciplinary course is open for participants from Industry, Faculty members and Research Scholars, PG and UG students from Institutes/ Universities.

MODE OF CONDUCTION

The training program will be conducted in hybrid mode.

REGISTRATION FEE

Faculty/staff	₹ 295 (including GST)
Research Scholars/students	₹ 118 (including GST)
Persons from industry	₹ 1180 (including GST)

Detail of Bank: Central Bank of India,
SLIET Longowal
Account No: 5825185409
Account Name: IS-RIA-2025
IFSC Code: CBIN0283105

IS RIA 2025
12439644@cbin

IMPORTANT DATES

Last date for registration : July 05, 2025
Notification of selection : July 06, 2025

How to APPLY FOR COURSE

Registration is required for participating in this course. Applicants can fill registration form at https://forms.gle/DJVfwwzZMAQ6Jst76

ADDRESS FOR CORRESPONDENCE

Dr. Amit Rai (Coordinator), Mo. No. **9465603090**
Dr. Nikhil Prakash(Coordinator),Mo.No. **8968649835**
E-mail: **isria2025@sliet.ac.in**