SAFETY IN CONSTRUCTION

PROF. J. UMA MAHESWARI
Department of Civil Engineering
IIT Delhi

TYPE OF COURSE : Rerun | Elective | UG/PG
COURSE DURATION : 8 Weeks (21 Feb' 22 - 15 Apr' 22)
EXAM DATE : 23 Apr 2022

INTENDED AUDIENCE : Civil Engineering Students
INDUSTRIES APPLICABLE TO : Any Construction Industry

COURSE OUTLINE :
This course aims to make the students well-versed with the latest safety and health regulations and the Indian Standards applicable to the construction industry.
At the end of this course, the students will be able to plan, assess, analyze and manage the hazardous construction project sites.

ABOUT INSTRUCTOR :
Prof. J. Uma Maheswari is Associate Professor in the Department of Civil Engineering at Indian Institute of Technology Delhi. She is very active in teaching several undergraduate and postgraduate level courses in Construction Project Management at Indian Institute of Technology Delhi. For several years, she was teaching three postgraduate programmes- Construction Engineering and Management (MHRD), Construction Technology and Management (L&T sponsor) and Metro Rail Transport: Technology & Management (DMRC sponsor). She was instrumental in developing and structuring the PG Diploma program in Metro Rail Transport: Technology & Management.

COURSE PLAN :

Week 1**:** Basic terminology in safety, types of injuries, safety pyramid

Week 2**:** Accident patterns, theories of accident-causation

Week 3**:** Planning for safety budget, safety culture

Week 4**:** Introduction to OSHA regulations; Role of stakeholders in safety

Week 5**:** Site safety programs - Job hazard analysis, accident investigation & accident indices-violation, penalty

Week 6**:** Safety during construction, alteration, demolition works - Earthwork, steel construction, temporary structures, masonry & concrete construction, cutting & welding

Week 7**:** SoPs (Safe Operating Procedures) - Construction equipment, materials handling-disposal & hand tools

Week 8**:** Other hazards - fire, confined spaces, electrical safety; BIM & safety