

ADVANCED DIPLOMA IN FIRE & INDUSTRIAL SAFETY MANAGEMENT

Affiliated to
WEST BENGAL STATE COUNCIL OF TECHNICAL & VOCATIONAL EDUCATION
AND SKILL DEVELOPMENT (WBSCTVESD)

ONE YEAR DAY COURSE

ELIGIBILITY CRITERIA

Graduate or Diploma/Degree in Engineering/ Technology / Science or its equivalent examination

TIMING

Thursday, Friday, Saturday and Sunday (10:30 am - 5:00 pm)

COURSE FEES

1st Semester : Rs. 50,000/- (Session fees)

Library Caution Deposit : Rs. 2,500/-
(Refundable)

Security Deposit : Rs. 2,500/-
(Refundable)

2nd Semester : Rs. 45,000/- (Session fees)

APPLICATION FORM & BROCHURE - HOW TO APPLY

Option I: Online application through Debit/Credit
Card/UPI/Net Banking/Bharat-QR

Option II: Collect the Admission Brochure and
Application Form from the reception
counter of IISWBM against cash payment
of Rs. 500/-.

(The Institute reserves the right to revise / change the fees as and when necessary)

For Any Query, Mail at sarbani_iiswbm@yahoo.co.in
or Write WA Message at 9874646208.

The last date for issue and submission of the completed Admission Form is August 16, 2023

For Details Contact:

Registrar

Indian Institute of Social Welfare and Business Management
Management House, College Square (West), Kolkata 700 073

Phone : (033) 4023 7474, 2219 1683, 2241 8694/8695/5792/3756, 9874646208, Fax : (033) 2241 3975
E-mail: admissions@iiswbm.edu / sarbani_iiswbm@yahoo.co.in , Visit us at: www.iiswbm.edu



2023-24



IISWBM
Our graduates nurture and build companies



FOREWORD

Indian Institute of Social Welfare and Business Management (IISWBM), the first Management Institute in India and one of the Premier B-Schools in the country has introduced an Advanced Diploma in Fire & Industrial Safety Management. The Diploma Certificate will be issued by the West Bengal State Council of Technical & Vocational Education and Skill Development (WBSTCVESD). Focus is given on industrial safety including fire safety management. As the name suggests, industrial safety refers to the safety management practices that apply to the industrial sector. Those processes aim to protect industrial workers, machinery, facilities, structures, and the environment. The main objective of this programme is to give increased emphasis on specific skills development at the post graduate level with potential for employment. Section 40B of the Factories Act of 1948 makes it imperative for factory owners to appoint safety officers in every factory subject to certain condition. Furthermore, the West Bengal Fire Service Act is being amended to mandatorily appoint a qualified fire manager in any high-risk establishment. The course has been designed by a team of renowned professionals and academia drawn from the Directorate of Factories, West Bengal Fire and Emergency Services, Government of West Bengal and IISWBM with the objective to create a new career opportunity for the youth that has the potential to change their lives for the better within a very short span. The programme will be for 12 months divided into two semesters of 6 months each.



Shri Dipankar Das Gupta
Director, IISWBM

INDIAN INSTITUTE OF SOCIAL WELFARE AND BUSINESS MANAGEMENT (IISWBM)

Indian Institute of Social Welfare and Business Management (IISWBM) was constituted on 25 April, 1953 by a resolution passed by the Senate of the University of Calcutta. The meeting of the Senate was presided over by Mr Justice Rama Prasad Mookerjee. This was the culmination of the joint initiative taken by the University of Calcutta, the Government of West Bengal, the Government of India and the captains of industry to set up for the first time a management education institute in India, a concept alien to many in the educational fraternity at that time. The Institute has successfully reached its Diamond Jubilee Year, signifying 60 years of eventful journey in management education in India since that day. IISWBM, the first management institute of India, was thus established by Dr. B C Roy, the then Chief Minister of West Bengal as its Founder-President and Prof. D. K. Sanyal as the first Director. The Government of India, Department of Posts in recognition of 50 years of glorious existence of the first B-school in the country, released a Commemorative Postage Stamp on IISWBM on 25 April, 2004 in New Delhi. The Institute takes pride in its faculty that consistently ranks highest amongst premier B-schools in terms of their intellectual capital. IISWBM is known for introducing and successfully conducting socially relevant and innovative management programme. IISWBM has always had a ragging-free environment.

INFRASTRUCTURE

IISWBM provides the faculty and students with the state-of-the-art, technologically advanced, modern, air-conditioned, and large campus in the heart of the city.

IT FACILITIES

The Computer Centre provides state-of-the-art resources to facilitate the academic and administrative activities of the Institute. It provides high-end academic support to the students, lease-line internet connection through wireless and wired LAN. Students have access to continuous free Wi-Fi facility at the Institute.

CENTRAL LIBRARY

The Central Library has more than 52,000 textbooks in all functional areas of Management, current International and National journals and more than 100 periodicals on relevant topics. It also has electronic books (from Cambridge & Springer), electronic journals (Ebsco & J-Gate) and online Company Databases (viz., PROWESS, CRISIL and SAS) for the benefit of the users. The services are fully computerized. The library remains open from 10:00 am to 8:00 pm on all working days.

HOSTEL

The Institute provides safe, separate, well-furnished, and comfortable hostel facility to both male and female outstation students subject to availability of seats.

GYMNASIUM

The Institute also maintains a well-equipped gym with all modern equipments and a trainer to guide and encourage students to work out daily at the Institute.

CANTEEN

The Institute has a canteen facility offering a variety of healthy cuisine at reasonable and affordable rates. It is essentially a students' zone with free Wi-Fi facility.

THE ADVANCED DIPLOMA IN FIRE & INDUSTRIAL SAFETY MANAGEMENT

Fire & Industrial Safety Management has assumed great importance in the context of growing urbanization of the State. The Factories Act was enacted with the sole aim of creating better and safe working conditions and environment for the workers in a factory and ensuring that the welfare and safety measures put in place to safeguard the physical and mental well-being of the workers are consistently followed. Among other welfare measures regarding workers, the safety of the workers while working in the factory is of the most importance, and the statute aims to reduce the number of industrial accidents, deaths, diseases, and there are other health hazards that are faced by factory workers. The provisions with respect to the appointment of safety officers and their duties arrested the direction to ensure the safety of factory workers. A safety officer is required to be employed mandatorily in a factory with 1000 or more workers or if the state government believes that a factory isn't a requirement for a safety officer due to the dangerous nature of the manufacturing processes and operations of the factory. The duty of the safety officer extends from ensuring the practice of safety measures in the factory to conducting seminars related to safety or to inspect the machinery or industrial accidents and deaths, among other things. Flouting the mandate of appointing a safety officer in factories that are required to appoint one can lead to penalties.

High risk buildings, Commercial complexes, IT sector, Multiplex, Private medical institutes and Nursing homes, Industrial establishments in the large as well as MSME sectors must have modern safety system and monitoring practice on a regular basis. It is not only important to have in place the necessary amount of safety equipments in a commercial complex, but it is also equally important for some members of that fraternity to actually undergo some sort of safety training. Basic training and the use of equipments can be done for employees, who would need a guide to let them know how to operate something as basic as a fire extinguisher. For security personnel, who are the ones responsible for the safety of all the individuals in the commercial complex, an in-depth training can be provided. This may include training on how to use the numerous instruments which the complex is equipped with. The training will also include helping them to deal with the fear and panic that is associated with a fire. They will be tutored on how to best gauge exits, and quick ways to help individuals leave the building. These evacuation procedures can come in handy during emergency situations when there might not be any lights or visibility might be greatly affected. Having all the safety equipments and necessary accessories for a fire hazard is of course important. But, if there is no one available who knows how to use these safety devices during situations that require their usage, then there is no use of having advanced, state-of-the-art equipment around. Proper safety training can prepare the right individuals and save lives when it is most required. So, there is dire need of specialized training and necessary skill development. Imparting this fire & industrial safety training can prove to be lifesaving during practical situations.



THE COURSE OBJECTIVES

This course has four key objectives:

- To equip manpower to deal with inspecting the plant to ensure that the working conditions environment of the plant is safe for the workers and that the processes and operations followed by the workers while working in the factory are not a dangerous or hazardous risk to their safety and health.
- To train manpower to explore the various possibilities of preventing fire & disasters and taking necessary precautions against fire and to lessen the disaster and health hazards and provide right counsel for ensuring total safety and health of the society at large.
- To ensure that the company is in compliance and adheres to Occupational Health and Safety (OHS) guidelines.
- To give increased emphasis on specific skills development at the post graduate level with potential for employment.

THE COURSE CONTENT

This course will expose students to the following major clusters of topics:

- Fundamentals of Industrial Safety:** Safety Hazards; Safety Incidents; Personal Protective Equipments; Behaviour Based Safety.
- Basics of Fire Science:** Chemistry of Fire; Physics of Fire; Fire Science; Products of Combustion.
- Fire Risk in Hazardous Elements:** Fire Risk in Explosives, Plastics & Rubbers, Radioactive Materials; Fire Risk in Flammable Liquids and Gases & Dust; Electricity and Fire Risks; Aircraft & Ship Fire.
- Fire Fighting Agents & Appliances:** Fire Fighting Agents; Fire Fighting Equipments; Fire Service Equipments – Pumps, Hoses, Ladders, etc; Personal Protective Equipments.
- Fundamentals of Fire Protection & Control Technology:** Hydraulics and Water Relay; Fire Hydrant System and Sprinkler System; HV & MV Water Spray and Foam System; Fire Detection & Alarm System.
- Fire Safety in Buildings:** Building Studies; Smoke Movement in Building; Heating, Ventilation & Air Conditioning System; Fire Safety Requirements.
- Industrial Safety Management:** Safety Philosophy; Safety Organisations; Safety in Construction; Occupational Health.
- Fire & Industrial Safety Management & Administration:** Safety Management; Safety Administration; Fire Service Management; Fire Service Ground Operation and Administration.
- Fire Prevention & Life Safety:** Means of Egress; Fire & Evacuation Drill; Various Rescue Techniques; First Aid & Resuscitation.
- Risk Assessment & Safety Audit:** Risk Assessment; Safety Audit; Emergency Management Plan; Routine Inspection and Reporting.
- Design Engineering and Drawing of Fire Protection System:** Basic Principles of Drawing; Design Basis with Schematic Diagram of Fire Protection & Detection System; Foam Based Protection System; Chemical Based Fire Protection System.
- Fire & Industrial Safety Management Legislation:** Fire & Industrial Safety Acts & Rules; NBC of India Part 4; Fire Safety Standards; Fire Safety Policy & Guidelines.



PRACTICAL TRAINING

West Bengal Fire & Emergency Services (WBSES) has a state-of-the-art training facilities in their Institute. Students undergoing Fire & Industrial Safety Management course will receive hands-on practical/ laboratory training from the Institute of WBSES. Among various facilities of training, major focus is given on Emergency Methods of Rescue; First Aid and Resuscitation; Analyzing different fire situations and firefighting; Water Relay; Fireman's Lift and Carry; Emergency Evacuation Drill Practice; Command and Control Procedure at Fire; Lowering Casualties from Height; Examining building construction and occupancy to ensure fire and life safety; Demonstration of Live fire fighting in different situations; Analyzing the concept of accident cause and prevention, accident investigation, analysis and safety management; Planning and execution of fire station administration; Implementation of provisions related to safety, health and welfare in respect of Factory Act etc.

Department organizes various field visits to understand Fire and Industrial Safety Measures, Plant/Building Layout, Storage and Process Details, Fire Risk Analysis, Fire & Industrial Safety Management, Contingent Planning, Fire and Life Safety Systems in Highrise Residential Building, Business Building, Shopping Mall/Departmental Store/Mixed Occupancy, Starred Hotel, Hospital/Nursing Home, Educational Building, Warehouse, Fire Station, Chemical Plant, Thermal Power Station, Refinery/Petrochemical Industry, Airport, Jute/Cotton Mill, Iron & Steel Plant, Manufacturing Industry, etc.

FACULTY

Director, IISWBM: Shri Dipankar Das Gupta
Head, ADFISM: Dr. Sarbani Mitra
Adviser, ADFISM: Prof. Brendra Mohan Sen

Core Faculty	
Prof (Dr) K M Agrawal	Prof (Dr) B K Choudhury
Dr Arindam Dutta	

Guest Faculty	
Mr D P Biswas	Mr Sekhar Dey
Mr A Banerjee	Mr S K Allevy
Mr Swapan Banerjee	Mr Sujay Banerjee
Mr Amal Bhattacharjee	Mr Indranil Das
Dr Priyanka Roy	Mrs Hoyell Dutt

BENEFITS FROM THIS COURSE

On completion of this course, students could look forward to a career in any of the following sectors:

- Any factory with 1000 or more workers or if the state government believes that a factory isn't a requirement for a safety officer due to the dangerous nature of the manufacturing processes and operations of the factory.
- Large manufacturing organizations particularly those like petroleum refineries, petrochemicals and plastic, fertilizers, textiles, LPG and LNG handling and bottling plants, chemicals and other plants, aircraft industry, where there are risks of fire.
- Fire departments of local government bodies i.e. Government Fire Services, insurance companies, architectural and building design, project management, etc.

Action has been taken to amend the West Bengal Fire Service Act for including the statutory provision of appointment of a qualified fire manager in addition to providing stringent fire protection and detection systems in any high-risk establishment to look after the fire & life safety matters of the occupants.

SELECTION PROCEDURE

The applicants for the admission to the Fire & Industrial Safety Management Course short-listed on the basis of academic performance would be required to appear for Group Discussion and Personal interview. Total strength of the students to be admitted is 30 (Thirty) only for Day course.

EXAMINATION REGULATIONS

The Council conducts the examinations according to the academic calendar. The date of commencement of examination is notified by the WBSTCVESD. Examination and Registration Fees : to be paid as specified by WBSTCVESD.