



# **Ergonomics and Workplace Design for Safety and Productivity Training Course**

**Ref: #HSE5520**



## **Course Introduction / Overview:**

Ergonomics is more than just adjusting a chair; it is the science of fitting the job to the person to optimize human well-being and overall system performance. This comprehensive training course, offered by BIG BEN Training Center, is designed to provide professionals with the strategic and practical skills needed to design workplaces that reduce injuries and enhance productivity. The program goes beyond reactive measures, focusing on a proactive approach to risk assessment and workplace design. Participants will learn how to identify ergonomic risk factors, conduct assessments, and implement practical solutions that improve comfort, reduce musculoskeletal disorders, and increase efficiency. This training is for those who are ready to take on a leadership role in creating a healthier and more productive work environment. Drawing on the foundational work of academics like Professor Karen Jacobs, an occupational therapy and ergonomics expert, the course provides a solid foundation of theoretical knowledge combined with practical, real-world application. It addresses key topics such as human factors, biomechanics, and the impact of the work environment on employee well-being. BIG BEN Training Center is committed to equipping professionals with the advanced skills necessary to design a safe and productive workplace.

## **Target Audience / This training course is suitable for:**



- HSE managers and coordinators.
- Ergonomists.
- Engineers and designers.
- Human resources professionals.
- Occupational health specialists.
- Operations and production managers.
- Anyone involved in workplace design or risk assessment.
- Government regulators.

### **Target Sectors and Industries:**

- Manufacturing and assembly.
- Office and administrative services.
- Healthcare.
- Construction.
- Transportation and logistics.
- Energy and utilities.
- Information technology.
- Government agencies and public services.

### **Target Organizations Departments:**

- Health, safety, and environment (HSE) departments.
- Human resources.
- Operations.
- Engineering and design.
- Facilities management.
- Risk management.
- Quality assurance.



## **Course Offerings:**

By the end of this course, the participants will have able to:

- Conduct an ergonomic risk assessment.
- Identify common ergonomic risk factors.
- Design an ergonomically friendly workstation.
- Implement controls to reduce musculoskeletal disorders.
- Analyze the biomechanics of lifting and manual handling.
- Develop and deliver basic ergonomics training.
- Evaluate the effectiveness of ergonomic interventions.
- Ensure compliance with ergonomic guidelines and standards.
- Link ergonomics to overall productivity and well-being.

## **Course Methodology:**



This training course at BIG BEN Training Center uses a highly practical and hands-on methodology to ensure that participants are prepared to apply ergonomic principles in the real world. The program combines clear, detailed lectures with interactive case studies from a variety of industries. This allows participants to analyze real-world scenarios and develop problem-solving skills. The core of the course is built around practical workshops where participants will conduct a simulated ergonomic assessment of a workstation. They will practice using tools and techniques for data collection and risk analysis. The instructor provides personalized feedback and guidance throughout the program, helping each participant master the core competencies. By focusing on practical application and simulation, BIG BEN Training Center ensures that participants leave with the confidence and skills needed to effectively identify and resolve ergonomic issues.

## **Course Agenda (Course Units):**

### **Unit One: Foundations of Ergonomics**

- The science of ergonomics and human factors.
- The business case for ergonomics.
- Identifying common ergonomic risk factors.
- The link between ergonomics and productivity.
- Understanding biomechanics and anatomy.
- Ergonomic guidelines and standards.
- The role of ergonomists.

### **Unit Two: Ergonomic Assessment and Analysis**



- Conducting a proactive ergonomic assessment.
- Using observational and measurement tools.
- Analyzing risk factors for various tasks.
- Assessing workstation design.
- Manual handling and lifting analysis.
- Assessing repetitive motion tasks.
- Communicating risk assessment findings.

### **Unit Three: Implementing Ergonomic Solutions**

- Applying the hierarchy of controls.
- Designing ergonomic interventions.
- Selecting and adjusting ergonomic equipment.
- Principles of safe lifting and material handling.
- Workplace layout and design.
- Ergonomic solutions for office and industrial environments.
- Developing a stretching and exercise program.

### **Unit Four: Ergonomics for Specific Industries and Tasks**

- Ergonomics in manufacturing and assembly lines.
- Office ergonomics.
- Ergonomics in construction.
- Manual handling in logistics.
- Ergonomics for computer use.
- Designing for diverse populations.
- Adapting to new technologies.

### **Unit Five: Management and Training**



- Developing an ergonomics program.
- Training employees on ergonomic principles.
- Fostering employee participation.
- Measuring the effectiveness of the program.
- Auditing ergonomic controls.
- Continuous improvement in ergonomics.
- The legal aspects of ergonomics.

## **FAQ:**

### **Qualifications required for registering to this course?**

There are no requirements.

### **How long is each daily session, and what is the total number of training hours for the course?**

This training course spans five days, with daily sessions ranging between 4 to 5 hours, including breaks and interactive activities, bringing the total duration to 20 - 25 training hours.

### **Something to think about:**

How can a proactive approach to ergonomics transform a company's safety culture from one focused on injury reporting to one dedicated to preventing harm and enhancing employee well-being?

### **What unique qualities does this course offer compared to other courses?**



This program stands out by providing a comprehensive and hands-on approach to ergonomics that is directly tied to business outcomes. While many courses cover general safety topics, this training is designed to give professionals a deep understanding of the science of ergonomics and its practical application. The course's unique quality lies in its blend of theoretical knowledge with real-world case studies and hands-on workshops where participants practice conducting ergonomic assessments. It goes beyond simple fixes and teaches participants how to design and implement a complete ergonomics program that not only reduces injuries but also boosts productivity and employee morale. This makes the program a valuable opportunity for professionals to become true experts in creating a safer, more efficient, and healthier work environment.