

Green Technologies Institute

INDOOR ENVIRONMENTAL HYGIENIST PROGRAM

Bioaerosols Assessment and Control (15 Hours)

This course is designed to provide the professional with the tools necessary to develop an investigative strategy, conduct a building walkthrough, develop a bioaerosol sampling plan, analyze and interpret sampling data. This course is designed to provide an interdisciplinary understanding of the major airborne biological agents commonly found in indoor environments. Those agents include microorganisms that are viable and non-viable, cultivable and non-cultivable, the fragments, toxins and particulate waste that originate from living organisms.

Introduction to Mold Remediation (30 Hours)

This course is designed to provide the learner with the principles and practices of professional mold remediation as described in the ANSI/IICRC S520-2008 2nd Ed., "Standard and Reference Guide for Professional Mold Remediation."

Mold Assessment (Part One) (30 Hours)

This course is designed to provide the professional with the foundational tools necessary to understand the principles and background for mold evaluation and control. Topics include the scientific method, dampness and biological growth, and the building as an ecosystem.

Mold Assessment (Part Two) (30 Hours)

This course is designed to provide the professional with insights into the ecology of mold, understanding moisture in buildings, moisture dynamics, plumbing and mechanical system impacts on mold growth, and proper documentation of the assessment.

Mold Remediation (30 Hours)

This course is designed to provide the professional with the most contemporary principles and practices of professional mold remediation. Topics also include safety and health, equipment tools and materials, limitations, complications, complexities and conflicts, and remediator qualifications.

Sampling Methodology (30 Hours)

This course is designed to provide the professional with the foundational knowledge to understand proper sampling criterion, sampling design, applications and approaches, collection methods and instruments, sample preservation, and laboratory analysis interpretation.

Damp Indoor Environments and Health (30 Hours)

This course is designed to provide the professional with the background and methodological considerations for understanding the relationship between damp buildings and human health. Topics include exposure assessment, toxic effects of fungi and bacteria, human health effects associated with damp indoor environments and prevention issues.

Indoor Air Quality (Part One) (30 Hours)

This course is designed to provide the professional with a foundational knowledge of indoor air quality problems and issues in residential and commercial properties. Topics include the causes of indoor air pollution, problems resulting from indoor air pollution, identification of pollutants, case histories and solving indoor air problems.

Indoor Air Quality (Part Two) (30 Hours)

This course is designed to provide the professional with a guide to the principles, techniques, and resources available for professional indoor air quality assessors. Topics also include how to develop an IAQ profile of a building and write an IAQ management plan for the building.

Principles of Heating, Ventilation and Air Conditioning (30 Hours)

This course is designed to provide the professional with an understanding of the principles and practices of HVAC systems and their impact on IAQ issues. Topics include systems concepts and configurations, heat pumps and heat recovery systems, duct systems, closed water systems, and system design problems.

Introduction to Industrial Hygiene (30 Hours)

This course is designed to provide IAQ professionals with an introduction to the principles and practices of industrial hygiene and an understanding of the interrelationships of industrial hygiene to the field of IAQ. Topics include the history and philosophy of industrial hygiene, hazard recognition and evaluation, physical agents, the human and occupational environment, and the management of industrial hygiene issues.

Allergies and Allergens (30 Hours)

This course is designed to provide IAQ professionals with an overview of allergies and allergens associated with IAQ. Topics include Outdoor and Indoor allergens, the structure and function of allergens, overview of asthma, rhinitis, sinusitis, insect allergies, and dermatitis.

Understanding Dust in Indoor Environments (30 Hours)

This course is designed to provide IAQ professionals with an insight into dust in indoor environments; its consistency, contents, and function in the realm of IAQ. Topics include, where does it come from and where does it go? How does it affect everything in the indoor ecosystem? Why is dust problematic for humans and what are its benefits?

Insurance Aspects of Indoor Air Quality (15 Hours)

This elective course is designed to provide the IAQ professional with an introduction to property insurance issues surrounding IAQ problems in residential and commercial buildings. Topics will include coverage limitations, exclusions, and terminology frequently encountered in insurance policies. Methods for working with insurance agents and adjusters will be discussed.

Ethics for IEQ Practitioners (30 Hours)

This course is designed to provide the IEQ professional with an understanding of the values that lie behind moral choices; the reasons people give for their moral choices, and the language they use to describe them. Ethics is the rational discussion of that process. Rights, responsibilities and integrity related to professional decision-making lies at the core of the course. Students will focus on the development of a guide for responsible conduct for IEQ Practitioners.

Biological Safety: Principles and Practices (30 Hours)

This course is designed to provide the IEQ professional a foundation in the principles and practices of biological safety related to both the workplace and the laboratory. Major topic areas include: Hazard Identification; Hazard Assessment; Hazard Control; Administrative Controls, and Special Considerations for Biosafety. Decontamination and disinfection are related to exposure in the field.

IEQ Report Writing (30 Hours)

This course is designed to provide the IEQ Professional with the skill sets necessary to develop a comprehensive IEQ assessment report that encompasses the definition of the problem, hypotheses development, sampling methodology, analysis of the sample results, and the summary and conclusion of the assessment.