Plan your 2027 Ammonia Refrigeration Training

In collaboration with UW–Madison's Industrial Refrigeration Consortium, our ammonia refrigeration courses provide comprehensive coverage ranging from the latest in ammonia refrigeration technology to industry codes, standards, and safety best practices.

Whether you need to learn the basics of ammonia refrigeration systems or hone your design skills, we provide you with access to grow your knowledge.

> ***So much valuable insight in what we do and see everyday. All these classes have been filled with nuggets [that are] easy to apply in the workplace and become better for it.***
>
> **– Leopold Cacho, PSM Specialist, Certified Industrial Partners/Preston Refrigeration, Ammonia Refrigeration System Safety**

Process Safety Management Professional Certificate

Offered jointly with the Industrial Refrigeration Consortium (IRC), this Certificate will help you acquire the skills and knowledge required to successfully implement and continuously improve your Process Safety Management (PSM) and Risk Management Plan (RMP) programs. Earn your Certificate by completing five core courses and one elective course.

LEARN MORE
go.wisc.edu/PSMPCert2027

Interdisciplinary Professional Programs
COLLEGE OF ENGINEERING
UNIVERSITY OF WISCONSIN–MADISON

LEARN MORE AND SIGN UP
go.wisc.edu/AmmoniaRefrigeration2027

UPCOMING COURSES

Process Safety Management Audits for Compliance and Continuous Safety Improvement

#E029 | January 20 – 22, 2027 | Madison, WI
$1,595 | 2 CEU / 20 PDH..... go.wisc.edu/E029

This workshop-style course provides a deep dive into the audit process for OSHA's PSM standard, including scoping, data collection, interviewing, and reporting. By the end of the course, you'll be prepared to lead audits and not only meet compliance requirements, but also improve system reliability and safety performance.

Introduction to Ammonia Refrigeration Systems

#E030 | March 3 – 5, 2027 | Madison, WI
$1,595 | 2 CEU / 20 PDH..... go.wisc.edu/E030
#E035 | October 6 – 8, 2027 | Madison, WI
$1,596 | 2 CEU / 20 PDH..... go.wisc.edu/E035

This course provides a comprehensive introduction to ammonia refrigeration systems, including refrigerant properties, system components, system layouts, and overall cycle behavior. You'll gain a solid understanding of compressors, condensors, evaporators, valves, and critical safety systems, with a strong emphasis on real-world applications that ensure safety and regulatory compliance.

Engineering Calculations for PSM and RMP

#E031 | March 22 – 26, 2027 | Live Online
$1,595 | 2 CEU / 20 PDH..... go.wisc.edu/E031

This course provides a practical foundation in the engineering calculations that underpin regulatory compliance for industrial ammonia refrigeration systems. You will learn how to estimate refrigerant inventory, basic concepts for safety relief systems design, ventilation systems design, mass and energy balances, and modeling atmospheric dispersion for off-site consequence analysis.

Ammonia Refrigeration System Safety

#E032 | April 7 – 9, 2027 | Madison, WI
$1,595 | 2 CEU / 20 PDH..... go.wisc.edu/E032

Learn from experts about OSHA and EPA requirements applicable to ammonia refrigeration systems – including agency representative(s) planning to attend. Learn about changes that are planned for EPA's Risk Management Plan program under the "Common Sense Approach to Chemical Accident Prevention" just released by EPA.

Process Hazard Analysis (Emphasizing Ammonia Refrigeration Systems)

#E033 | September 15 – 17 2027 | Madison, WI
$1,595 | 2 CEU / 20 PDH..... go.wisc.edu/E033

This course explores the essentials of conducting effective PHAs for ammonia refrigerated facilities, including regulatory requirements under OSHA's Process Safety Management (PSM) and EPA's Risk Management Plan (RMP) rule. You'll receive updates on how the recent SCCAP rule changes to RMP have impacted PHA requirements along with strategies to ensure compliance. This course is your opportunity to improve your ability to identify hazards, evaluate risks, and implement effective recommendations to ensure ammonia refrigeration systems safety.

Design of Ammonia Refrigeration Systems for Peak Performance and Efficiency

#E034 | September 20 – 24, 2027 | Madison, WI
$1,995 | 4 CEU / 40 PDH..... go.wisc.edu/E034

Learn principles for designing safe, efficient, and reliable ammonia refrigeration systems. Load calculation methods and psychrometric principles will be discussed to ensure you have a proper foundation before you begin component and system sizing. The latest codes and standards will be used throughout to ensure your system designs are compliant. You will also learn from experts about the latest research from the IRC that you can immediately apply to updates on your system specifications or your next system design.

Principles and Practices of Mechanical Integrity for Industrial Refrigeration Systems

#E036 | November 3 – 5, 2027 | Madison, WI
$1,695 | 2 CEU / 20 PDH..... go.wisc.edu/E036

This course provides an in-depth understanding of mechanical integrity best practices for ammonia refrigeration systems, with an emphasis on refrigerant piping and pressure vessels. You will explore the most common failure mechanisms such as corrosion and lesser common failure mechanisms such as stress cracking. You'll gain hands-on insight into inspection planning, including visual examination and non-destructive testing (NDT) technologies.

> ***Doug and his staff are very knowledgeable in the subject matter and I learned quite a bit even though I've been in the industrial refrigeration field for 30+ years.***
>
> *– Lewis Dickens, Multi Site PSM Coordinator, Principles and Practices of Mechanical Integrity for Industrial Refrigeration Systems*

LEARN MORE AND SIGN UP
go.wisc.edu/AmmoniaRefrigeration2027

Interdisciplinary Professional Programs
COLLEGE OF ENGINEERING
UNIVERSITY OF WISCONSIN–MADISON

601 University Ave., Third Floor • Madison, WI 53715
Phone: 800.462.0876 • interpro.wisc.edu