HVAC University Course Descriptions

Classes

- April 5, 12-1 p.m., CDT – COVID Mitigation Strategies Utilizing HVAC Systems
- April 13, 12-1 p.m., CDT – Motor Technology in the HVAC Industry
- April 19, 12-1 p.m., CDT – Kitchen Ventilation Systems: Meeting Codes and Standards
- April 20, 12-1 p.m., CDT – HVLS Fan Design, Application and Specification

COVID Mitigation Strategies Utilizing HVAC Systems Understanding

This course examines the role of HVAC equipment and systems in mitigating the risk of air borne viruses such as COVID-19. Fundamental technology such as outdoor air, ventilation, humidification, and filtration are reviewed along with additive technologies such as electronic air cleaning devices. A case study of the re-opening of a commercial building with a focus on HVAC systems is presented.

Motor Technology in the HVAC Industry

This course examines new and existing motor technology in the HVAC industry. A comparison of traditional AC induction motors, permanent magnet (PM) and electronically commutated (EC) motor technology is presented. The interactive demonstration illustrates the controllability, energy efficiency, reliability and payback of using EC motors in single phase applications. The demonstration will also introduce you to additional systems and applications for variable fan flow based upon pressure, temperature, humidity, volatile organic compounds (VOC), and carbon dioxide space control.

Kitchen Ventilation Systems: Meeting Codes and Standards

Based on good kitchen design principles, this course focuses on products and concepts that promote energy efficient kitchen ventilation design. The value of demand ventilation (variable volume) systems and strategies regarding the application and selection of the right system configuration for various applications is discussed.

HVLS Fan Design, Application, and Specification

This course covers the proper selection and specification of high volume, low speed (HVLS) fans for different applications. An overview of HVLS performance testing, performance data, safety and industry standards is included.