The objective of the American Society of Heating, Refrigerating and Air-Conditioning Engineers, or ASHRAE, design team is to select the most appropriate heating, ventilation and air-conditioning (HVAC) system for a defined building that meets the owner’s requirements. Many factors are considered in the selection including sustainability, human comfort and excellent indoor air quality, while maintaining cost effectiveness over the life of the building.

ASHRAE posts the project criteria for each year’s competition during the fall semester. The K-State team begins work on the project during the spring semester as part of credit course ARE715. The final submission includes a 30-page paper and 15-minute audio-visual presentation. Judging occurs first at the ASHRAE Kansas City Chapter level, winners then move on to the regional level and eventually all finalists are judged at the international level. Award recipients are announced in late summer and prizes awarded at the ASHRAE Winter Conference in January.

The 2014 ASHRAE HVAC System Selection first-place award went to six architectural engineering students from K-State. Since 2005, teams from K-State have received first place five times and placed second three times, which is unparalleled by any other university.