ARC 5662, Environmental Technology 4, 4 credits.

The focus of this course is on understanding both the how and the why of buildings’ environmental control systems—both active and passive ones.

Course Goals & Objectives:

Understand basic terminology and measurement units.
Understand key system functions (what they can and cannot do).
Understand the place of the various systems in typical building applications and contexts.
Be aware of the fundamentals of system selection, placement, components, sizing, and integration concerns.
Be able to make preliminary decisions regarding appropriateness of various systems and design concepts during the design process.

Student Performance Criterion/a addressed:

Research Skills
Ability to gather, assess, record, and apply relevant information in architectural coursework.

Building Service Systems
Understanding of the basic principles and appropriate application and performance of plumbing, electrical, vertical transportation, communication, security, and fire protection systems.

Building Systems Integration
Ability to assess, select, and conceptually integrate structural systems, building envelope systems, environmental systems, life-safety systems, and building service systems into building design.

Topical Outline:

Prerequisites:
None

Textbooks/Learning Resources:
None

Offered:
Spring only; annually

Faculty assigned:
Thomas Pugh (F/T)