Building Systems Engineering Technology provides instruction in the overall design of a wide range of mechanical, electrical and piping equipment as it pertains to a complete building system. Students use mechanical engineering principles to produce working drawings of electrical, heating, ventilation and air conditioning, as well as plumbing and fire protection systems for large scale commercial buildings. Most positions are with engineering firms, residential and commercial contracting firms or sales office environments.

As building system engineer technicians they may collaborate with engineers in systems design, applications, testing and development work. Those who work with mechanical contractors perform design, equipment selection, layouts, estimating and the supervision of building systems.

Starting Fall 2013

First Semester – Building Systems
» Building Design
» Print Reading
» Computer-Aided Engineering/Computer-Aided Design Software Programs
» Building Information Modeling
» Construction Management

Second Semester – Heating Ventilation Air Conditioning/Mechanical Systems
» Load and Energy Calculations
» Air Distribution Systems
» Hydronic and Steam Systems
» Refrigeration Systems

Third Semester – Electrical Systems
» Electrical Power Distribution
» Electrical Cost Estimating
» National Electric Code
» Lighting Design

Fourth Semester – Piping and Fire Protection
» Piping and Design
» Uniform Plumbing Code
» Fire Sprinkler / Suppression Systems
» Maintenance Awareness
» Preventative Maintenance and Routine Repair