



Shelton State Community College

Continuous Commissioning® Services

About the Facility:

Shelton State Community College is a public community college in Tuscaloosa, Alabama operated by the Alabama State Department of Postsecondary Education. Shelton is one of the largest two year colleges in the state. Sain Engineering Associates, Inc. (SEA) was tasked to improve the performance of building operations systems through Continuous Commissioning® on the Martin Campus. The project involved evaluation and optimization of the Heating, Ventilation and Air Conditioning (HVAC) units.

Recommended Solutions

The documented utility savings resulted from optimizing HVAC equipment accordingly:

- Optimized hot water supply temperature to reduce boiler demand while maintaining heating needs
- Programmed control strategies to reduce/eliminate dehumidification based on space requirements
- Programmed air handling units to reset the supply air temperature based on space temperature and setpoint
- Monitored zone reheat valves to determine overcooled areas, verified flow rates versus design, making necessary corrections
- Modified terminal box flow rates to reduce the amount of unoccupied cooling and heating
- Investigated leaking or opened preheat valves on air handling units and manually closed valves on units
- Built air handling unit schedules to shut down when unoccupied and to restart if spaces required conditioning
- Verified outside air and return air damper operation on air handling units
- Examined chilled water valves for leakage when commanded closed

Documented Savings

In just four months, the savings had already surpassed the projected annual goal of \$85,000 and continued to grow with ongoing maintenance and careful oversight of the system. The documented savings for ten months was \$387,144 and aggregate savings at the end of the SEA agreement were \$663,144 which is 10,810,384 kWh.

SEA helped reduce utility costs by
\$387k in less than a year

8

Commissioned
Buildings

655k

Square Feet

2016

Completion Date

