ms consultants, inc.
engineers, architects, planners

SHELL CENTER FOR PROCESS TECHNOLOGY EDUCATION AT CCBC

CHALLENGE

THE COMMUNITY COLLEGE OF BEAVER COUNTY NEEDED TO RENOVATE AN EXISTING BUILDING AND PLAN AN ADDITION TO HOUSE THEIR NEW PROCESS TECHNOLOGY PROGRAM.

SERVICES

- Construction Administration
- Construction Documentation
- HVAC Engineering
- Architectural Design
- Structural Engineering
- Interior Design

SHELL CENTER FOR PROCESS TECHNOLOGY EDUCATION

The Community College of Beaver County (CCBC) hired ms consultants to design a two-phased building addition to their campus. The addition will serve as the home to their new Process Technology Program and be known as The Shell Center for Process Technology Education.

The new program, which partners with local industry leaders, prepares students for careers in regional technology-driven fields such the petrochemical and manufacturing industries. The new building will facilitate hands-on learning with technology, simulating real-world equipment commonly used by the local industrial community. This approach strengthens the pipeline of CCBC graduating students to the Western Pennsylvania industrial corporations for future employment.

A NEW TECHNOLOGY EDUCATION CENTER

During phase 1, the existing building was renovated and the roof was raised to provide high-bay space for hands-on testing equipment. The existing building provided enough power for the expansion, avoiding a large investment in new electrical infrastructure. Utilities such as gas and water are also available on site. Nitrogen and vacuum will be used in the chemistry lab and provided locally.

Next, for phase 2, a two-story, 10,500 square-foot addition was added to the building renovated in phase 1. The new addition includes office space, a new lobby entrance, three classrooms, a chemistry lab, and a 20-foot high-bay lab space to accommodate manufacturing-equipment. Natural lighting was an important asset both from a color rendition and energy management point of view in the lab spaces.

All working spaces are on the first level to streamline the movement of equipment, which can be large and cumbersome. The classrooms and office spaces are located on the upper level.

The aesthetic elements of the industrial environment were considered during the interior design process. The interior materials chosen are durable, to reflect the industrial aesthetic. The exterior material palette is derived from the existing context so it's cohesive. Alternating brick and metal panel walls break up the scale of the two-story west façade into intimate pieces. A glass curtain wall, encompassing both floors, encloses the entrance lobby and gives the addition a welcoming face. At night, this well-lit lobby acts as a beacon on campus.