

# Charles E. and Mary Parente Life Sciences Center, King's College, Wilkes-Barre PA

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## Mechanical Option

<http://www.arche.psu.edu/thesis/2005/rjw208.html>

### Project Team

- Architect: Quad 3 Group
- Building Systems: Quad 3 Group
- Construction Manager: Sordoni construction services.



### Building Statistics and Information

- 46,000 Square Feet
- Addition to existing science center
- Same floor to floor height as existing building
- Flat site with no apparent construction problems
- Located on corner of Jackson Ave and River St
- High foot traffic

### Building Systems:

- Mechanical: The addition uses four air handling units (100% outdoor air). Three of the four are variable air volume and the remaining is a constant air volume application. The VAV systems use terminal damper/reheat boxes for individual space control. Central cooling plant is air cooled and located on roof. Heating plant is a natural gas fired full modulating hot water boiler also in pent house.
- Structural/Architectural: Steel frame with metal decking/concrete floor system. The exterior walls are pre-cast concrete. The façade is a light beige color to match the existing science center as well as the adjacent courthouse annex building. Reflective glass is also used for an aesthetically pleasing effect. The roof is metal deck with an EDPM weather sealant covering.
- Lighting/Electrical: Typical 2x4 recessed fluorescent troffers in classrooms. Glass façade allows for day lighting in entrance/ lounge areas. Service is brought in to a switchgear/transformer station located outside the building. The typical voltage throughout the building is 480/277 and 277/120 3 phase.

