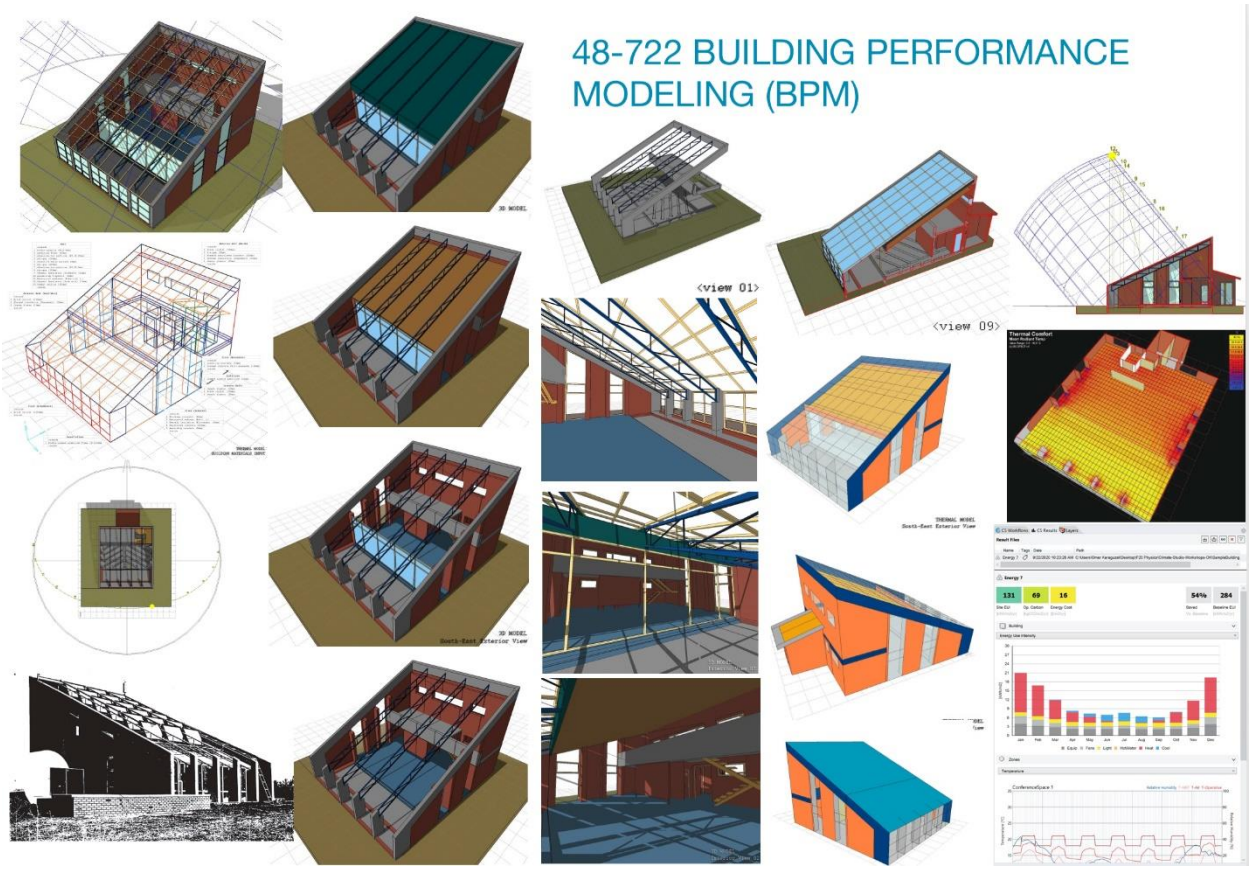

Geometric Analysis of a Whole-Building Energy Simulation Model (Renovation of the Passive Solar House, Ankara University, TR) (2003)

48-722 BUILDING PERFORMANCE MODELING (BPM)

The BPM course focuses on conceptual foundations and practical applications of advanced and integrated whole-building energy simulation programs with emphasis on architectural building envelope systems, mechanical electrical building systems and their controls (electric lighting and HVAC systems) and building integrated solar photovoltaic power systems. Students are engaged in project-based collaborative studies with emphasis on analytical methods of simulation-aided high-performance building design. Theoretical lectures and software demonstrations are supported with discussions of relevant building case studies and particular design solutions which exhibit an innovative character with the application of whole-building energy simulations in the evaluation and improvement of the total building performance starting from early stages of design development.