



Fisheye Lens Camera Image for Visual Discomfort Glare Analysis (Post Occupancy Evaluation Survey of the Fort Belvoir Office Building, VA, USA) (2015)

48-721 BUILDING CONTROLS AND DIAGNOSTICS (BCD)

Students' theoretical knowledge on energy and environmental performance assessment methods are leveraged with the hands-on approach of the BCD course which addresses research-grade concepts of building controls and diagnostics through actual building case studies and the application of field measurement techniques. Special emphasis is given to empirical evaluation of the performance of buildings and systems by considering interactions with occupants about thermal-visual-acoustics criteria. Students will acquire necessary skills to develop interactive dashboards to demonstrate building energy systems and their dynamic performance, conduct Post-Occupancy Evaluation and Measurement studies, develop advanced building control logics and algorithms, create virtual prototypes of these controls systems, and test them on actual building cases.