Center for Building Performance & Diagnostics (CBPD)

Research and graduate education focused on innovations in high performance buildings and infrastructures, building performance simulation, building data analytics, policy and economics, and indoor environmental quality for improving a shared quality of life and a sustainable future.

MS & PhD in Building Performance & Diagnostics

10 Faculty + Visiting Scholars
25 students 2021
Over 300 MS & PhD since 1980 + DDes
Oldest PhD in Building Science in the U.S.

1. Guidelines and Design Innovations for High Performance Buildings & Communities
2. Indoor Environmental Quality for Human Health & Productivity (with POE+M)
3. Innovations in Building Controls (with Testbeds) - Humans and Nature in the Loop
4. Advances in Simulation for High Performance Buildings and Sustainable Cities
5. Building and Urban Data Analytics for Advancing a Sustainable Built Environment
6. Policies and Economics for Advancing High Performance Buildings & Communities

Toolkit for Urban Regenerative Environments Katrini 2016
(Creating the Everyday Commons, Katrini 2019)
Persistent Workplace Plug-load Energy Savings and Awareness through Intelligent Dashboards Yun 2014
Machine Learning to Target Energy Retrofits for Commercial Buildings under Alternative Climate Change Scenarios Xu 2020
Advanced Building Thermal Simulation Coupling of Finite Volume Method and Nodal System Zhang 2011
Purposeful Play: Serious, Pervasive, Energy Games Bridge the Energy-Efficiency Gap, Srivastava 2020