

# WASHINGTON STATE UNIVERSITY

## Aggregated Intermediate Preservation Projects EE/ME HVAC Restoration (Academic Building Air Quality and Safety)

2009 – 11 Request:	\$3,080,000	Project Type:	Preservation (Renovation)
COP Ranking:		Project Phase:	Design/Constr
Institution Priority:	#7	Gross Square Ft:	94,148

This preservation project will renovate the existing deteriorating heating, ventilating, and air conditioning systems (HVAC) in the Electrical Engineering/Mechanical Engineering Building which was built in 1986. The project was included in the 2007-09 capital request as an aggregated intermediate preservation project because its cost is in the “less than \$5 million but greater than \$2 million” range.

The EE/ME HVAC restoration project was combined with several similar renewal projects to improve air quality in older academic buildings. The building provides space for the College of Engineering and Architecture departments of Electrical Engineering and Computer Science, School of Mechanical and Materials Engineering, the Material Research Center and Chemical Engineering.



The HVAC system is original equipment. It has had additional loading added and has deteriorated over time to the point where many subsystems are not functioning to design levels. This is causing negative pressure issues, lack of or insufficient ventilation (an air quality hazard), and inoperable controls. The renovation encompasses retrofitting the ventilation system with variable air volume dual fan systems; Variable Frequency Drive (VFD) installation; controls replacement; and cleaning and balancing the entire HVAC systems.

Renovating the HVAC systems in the EE/ME Building will help reduce the University’s deferred maintenance backlog. Postponing the project will result in the continual deterioration of the systems that could ultimately result in the shut down of classrooms, offices, labs and research in this 94,000 square foot building.