



## Welcome to Engineering Gateway

As you may be aware, Engineering Gateway is one of the most energy efficient lab buildings on campus and is part of the campus Smart Labs Program. Please take a moment to review these unique features.

**Centralized Demand Controlled Ventilation** – The *Aircuity* system installed in Engineering Gateway research laboratory spaces, monitors indoor air quality and adjusts supply and exhaust air delivery based upon indoor contaminant levels. The automated system samples packets of air and then analyzes them with a battery of sensors to determine air change rates required for each zone. The sensors are calibrated every six months and the system is monitored via a web interface.

**Red Button** – In the event of a chemical spill or other event requiring increased ventilation in a lab, an emergency ventilation override button has been installed. Pressing this button will increase air change rates to maximum while maintaining negative lab pressurization. This button should **not** be pressed in the event of a fire!

**Occupancy Controlled HVAC** – The Smart Lab design of the ventilation system includes occupancy based air change rate controls. Occupancy sensors will allow for air change rate reductions during unoccupied periods. The system does not affect fume hood ventilation. Upon initial entry after a long period of inactivity, the lab may feel stuffy, please allow a few minutes for the room to normalize.

**Lab Ventilation Display Unit** – The display panel located on the wall of each lab allows occupants to check the status of the room's air change rate, as well as ensure that the occupancy sensors are working properly. Please note that the panels are labeled Phoenix Controls Corporation and have a 3" x 3" LCD screen. Air change rates should remain at approximately 4 air changes per hour (ACH) when the lab is occupied and 2 ACH when unoccupied.

**Occupancy Controlled Lighting** – After manually turning on the lights with via a light switch, the overhead lights will automatically turn off during unoccupied periods. Overhead lighting may also be turned off manually. We encourage everyone to turn off all lights whenever they leave the laboratory for an extended period.

**Natural Interior Lighting/Automatic Overhead Lighting Reduction** - Engineering Gateway is designed to maximize interior illumination via natural lighting. In addition, the overhead interior lights are connected to photosensors that control the intensity of the interior lighting based upon the availability of outdoor light.

**Finelite LED Task Lighting** – Task lighting will be provided to users who require additional lab bench top lighting.

**Energy Efficient Filtration/Better Indoor Air Quality** – Engineering Gateway is equipped with energy saving high efficiency Merv 14 particulate filters. The result: lower energy costs and improved indoor air quality.