

## **Lighting Depth**

### **Space Introduction**

The four spaces for the lighting redesign include the plaza, lobby, auditorium, and the 5<sup>th</sup> floor sixty-capacity classroom of the Dorrance H. Hamilton Building. The grassy plaza consists of a 60,000 ft<sup>2</sup> courtyard used as a circulation space for the Dorrance H. Hamilton Building, Martin Building, Scott Library & Administration Building, and Orlowitz Residence Hall. The plaza area will also provide students and faculty with an area to enjoy the outdoors.

Upon entering the building through the curved glass façade, one would find themselves in the lobby of the building, which is the second space to be redesigned. The lobby will be mainly used for a circulation space with elevators, stairways, and a small retail space. The lobby also includes the entrance to the third space of redesign, which is the auditorium.

The 300-seat capacity auditorium resides on the first floor of the building, adjacent to the lobby. The auditorium provides a challenging redesign with a 15' high raked ceiling and 4800 ft<sup>2</sup> of space.

The sixty-capacity classroom is located on the 5<sup>th</sup> floor of the Dorrance H. Hamilton Building. Some other spaces that accompany the classroom on the fifth floor includes other classrooms, lecture halls, two skills simulation labs, storage rooms, a small lobby, and a library/meeting room. The back wall of the classroom is a curved glass ribbon window, which will have dual/solar blackout shades provided by the owner of the building.

### **Lighting Design**

The lighting design will provide the four spaces with an aesthetically pleasing atmosphere and ample light on the task plane. In order to accomplish this task, the IESNA Lighting Handbook and ASHRAE 90.1 were followed throughout the design process. The spaces were modeled in AutoCAD and exported into AGI32, where the lighting design was finished with various renderings and lighting calculations.