



UCLA Samueli School of Engineering

Introduction

The UCLA Samueli School of Engineering is ranked among the top ten public engineering schools in the U.S. It offers 28 degree programs and is home to eight externally funded interdisciplinary research centers, including those in space exploration, wireless sensor systems, and nanotechnology.

The School is also the birthplace of the internet and a pioneer in the fields of artificial intelligence, reverse osmosis, mobile communication and human prosthetics. UCLA administrators wanted the 250-seat auditorium, named the Dr. William M.W. Mong Memorial Learning Center, to be the centerpiece of its brand new building, Engineering VI, and for the space to reflect its rich history of engineering innovation.

By standardizing on Crestron, the Henry Samueli School of Engineering was able to create one of the most versatile learning environments on campus.

The space

The auditorium was built to promote distance learning; enable collaboration with other engineering and research institutions; host alumni events, facility meetings, movie presentations, distinguished speaker talks and expert panel discussions; and function as a traditional lecture hall. In order to accommodate these multiple uses, the space needed to be able to transition into four different modes of operation: distant learning, enhanced media capture, theatre/large events, and small department meetings.



The challenge

The university wanted to ensure the auditorium had all the technology required to create a dynamic learning hub and accommodate multiple modes of operation. It also needed a control system that with one touch could enable the room to transition into different modes of operation, and with another single touch, manage a request to speak system that adjusts lighting and microphones based on a speaker's location.

“Crestron DigitalMedia ensured that the Samueli School of Engineering’s new learning center can facilitate better communication and collaboration between students and faculty, both within the room and with those connected remotely.”

Brad Caldwell
President/CEO
Integrated Media Systems

The technology

School officials brought in Costa Mesa, CA based Crestron integrator Integrated Media Systems to make the plan a reality. Brad Caldwell, President and CEO, knew that Crestron would be the perfect solution for this project.

By standardizing on an all-new AV platform based on Crestron solutions, including DigitalMedia™, UCLA Engineering has been able to create one of the most versatile learning and communications environments on campus. Preset modes enable instructors, guest speakers, or school administrators to simply enter the auditorium, select their preferred configuration and immediately begin presenting.



Setting the mode

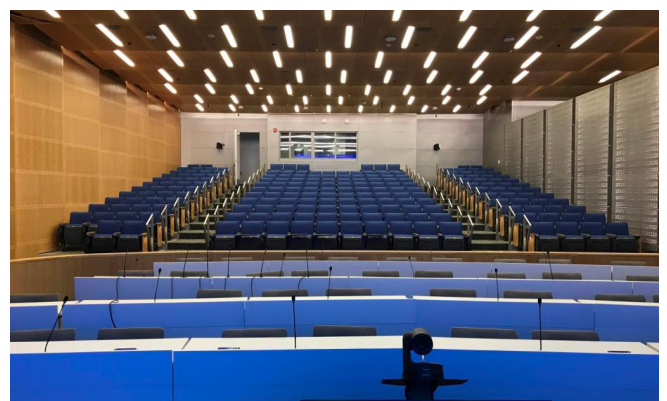
The Learning Center's mode of operation is accomplished by arranging the furniture at the front of the auditorium, selecting the room mode on the touch screen controllers, and by opening or closing the motorized curtain between the seating areas.

For example, when the auditorium is being used in the distant learning mode, the 25 tables and 50 seats, teaching station and monitor cart are positioned in a layout optimized for distance learning. When this room mode is selected via the touch screen, images are displayed only on the lower three rows of displays of the video wall to improve viewing angles for all participants. The microphones on all 25 tables are connected, while the microphones in the ceiling above the fixed seats in the sloped section of the auditorium are inactive. Lighting and sound reinforcement are also automatically adjusted. The curtain between the two seating areas is closed.

When the space is in enhanced media capture mode, the entire video wall is used, the curtain is opened, microphones are activated at both the tables in front and in the ceiling above the sloped section of the auditorium, and lighting and sound reinforcement are automatically adjusted. . In both of these modes, a wireless lavalier microphone is available for use by the instructor, along with a teaching station that enables the instructor to share content, annotate, queue up student questions, and control room audiovisual settings from a Crestron TSW touch screen.

Crestron equipment played an important role in helping this room achieve both its learning environment and multi-use goals. Crestron 10.1" touch screens (TSW-1052) were installed both on the teaching station and in the auditorium's control room for simplified control. The Crestron touch screen at the teaching station controls the room mode, video wall display, speaker and mic volumes, the presentation and annotator sources, request to speak system, lighting, Apple TV and Blu-Ray player, while the Crestron touch screen in the control room also controls the room's cameras, video wall presets, monitor cart display, and video conferencing and lecture capture systems.

By utilizing Crestron solutions and Integrated Media Systems' integration services in this space, the Samueli School of Engineering was able to create one of the most versatile learning environments on campus.





HENRY SAMUELI SCHOOL OF ENGINEERING & APPLIED SCIENCE

Results

Thanks to Crestron technology and the system integration expertise of Integrated Media Systems, this multi-purpose venue enables audience members, including those connected remotely, to experience a much greater level of participation via the seamless integration of the room's audio, video, lighting, presentation and request to speak systems. It also permits presenters and speakers to interact more effectively with audience members.

Finally, the project allows a large learning center to be used for multiple purposes, enabling it to be utilized far more often than a typical college auditorium or lecture hall. When you consider the budget and space restrictions that most colleges and universities face, innovative room mode solutions, like this one, may soon become the norm.

Featured products

- **AirMedia Presentation Gateway**
AM-100
- **Cameo® keypad, standard mount**
C2N-CBD-P
- **3-Series® DigitalMedia Presentation System 300**
DMPS3-300-C
- **32x32 DigitalMedia™ Switcher**
DM-MD32X32
- **FlipTop™ cable management system**
FT-600
- **10.1" Touch Screen**
TSW-1052

"Crestron allowed our team to build a multi-use, state-of-the-art learning center for students, faculty and staff that embodies the school's passion and drive for engineering innovation."

John Powell
Vice President, Sales & Marketing
Integrated Media Systems

