LSC Sponsor

INCLUSIVITY WITHIN THE U.S. MILITARY ACADEMY

CYBER & ENGINEERING ACADEMIC CENTER - WEST POINT, NY

EWING COLE

ARCHITECT:
Jacobs / EwingCole - Joint Venture
Lab Consultant: EwingCole

PROGRAM:
Provide innovative labs for Civil & Mechanical Engineering (CME), Electrical Engineering & Computer Science (EECS) and Systems Engineering (SE) + 450 Car Parking Structure + Bridge and Conference Center

DATA:
136,000 Gross Square Feet
82,600 Net Square Feet

PROJECT VISION:

- Strengthening the quality of STEM education at the Academy
- Attracting STEM talent for West Point, the Army, and the nation
- Integrating STEM knowledge and skills across fields
- Enabling cadets, faculty, industry partners, and military leaders to quickly synthesize and share massive quantities of data, test prototypes, strategize STEM innovations, and evaluate ethical considerations

GOALS AND OBJECTIVES:

- Develop a facility that is state-of-the-art, cutting edge, and inspirational
- Create a building that contextually integrates into the campus
- Provide an efficient layout based on the proposed program and adjacency requirements
- Develop a floor plan that promotes collaborative academic opportunities between cadets, cadets and faculty, and between the 3 departments of CME, EECS, & SE

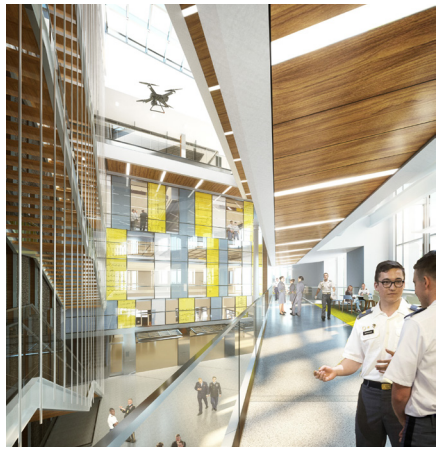
INTENDED OUTCOMES:

- In response to rapidly changing technology in the modern world, on the battlefield, and throughout the Army at large, CEAC will reflect West Point's growing leadership in the development and application of STEM-based solutions to the most difficult global challenges
- CEAC will enable and inspire the kinds of collaboration across disciplines that simply cannot happen now in the current academic spaces
- It will prepare cadets to confront the increasingly technological challenges of peacekeeping and defense
- Emphasizes shared technology and collaboration for advanced problem-solving
- Incorporates shared maker spaces, labs, & capstones to create an environment of interdisciplinary engineering
- Maximizes efficiency and flexibility in planning
- Will help to recruit the "best of the best" to join USMA

BOTTOM LINE:

"The bottom line is that CEAC will directly support General Milley's (Army's 39th Chief of Staff) vision of a technically competent force that can tackle complex problems."

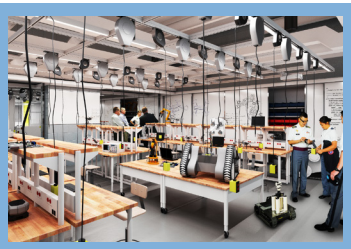
Dr. Led Klosky, PE, Dean's Executive Agent for Design and Construction



CYBER SECURITY - Multiple digital connections allows for cyber warfare amongst cadets

SYSTEMS DESIGN - Digital planning by collaborating with massive amounts of data

HIGH BAY - Inviting creativity and risk-taking for developing future inventions for the Army



ROBOTICS - Interdisciplinary effort - civil, mechanical, electrical & computer science

TESTING LAB - Developing devices to replace direct human interaction on the battlefield