

The UC Merced 2020 project is a three-phase expansion and redevelopment project that will nearly double the physical capacity of the existing campus. The master-planned development adds collaborative, mixed-use teaching, research, and student life amenities.

The project utilizes an innovative performance-based public-private partnership (P3) structure where a developer designs, builds, partially finances, operates and maintains the facilities under a 39-year term. This includes new housing, academic, research laboratories, dining, sporting, student life, and parking facilities.

Enpowered Solutions is serving as the third-party Commissioning Provider (CxP) performing the Fundamental Commissioning prerequisite and Enhanced Commissioning credit tasks associated with LEED® 2009 for New Construction rating system. Additional commissioning Services are being performed for campus support facilities including a research greenhouse, research server, competition pool, competition sports fields & parking lot lighting.

The contracting structure of this project provided challenges, especially with LEED® certification as a goal. The campus hired a developer to implement the project, and an owner's representative to ensure the campus standards and goals were being achieved. The Developer hired a general contractor, which in turn, hired Enpowered for the LEED® Cx services. Complicating the team structure further, the campus contracted with Johnson Controls to manage all aspects of the expanded campus for 39-years.

The complexity of this multi-phase, complex team structure project was amplified due to Enpowered joining the team just prior to the Acceptance Phase of the 1st Delivery. With nothing completed in preparation for the functional testing, including sequences of operations, Enpowered took over the project. Within a period of about two months, Enpowered took a leadership role to get the team back on track to deliver the functional performance testing and close out the 1st Delivery phase.



The 1st phase included the first three of the eleven buildings seeking LEED® certification and was completed in Fall 2018. Included were two student residence halls with residential community space and classrooms along with a Dining Pavilion with multipurpose and private dining rooms. This phase added 161,000 assignable square feet with 700 new on-campus student beds, a 600-seat multipurpose dining facility, new classrooms, and 940 new parking spaces.

UC MERCED 2020 PROJECT OVERVIEW

- New classrooms and research laboratories
- Faculty offices
- 1,700 new on-campus beds
- 1,500 additional parking spaces
- Conference facilities
- Competition pool, recreation amenities
- Student dining and wellness center
- U.S. Green Building Council LEED Gold minimum for 11 buildings
- Delivered in phases between Fall 2018 and Fall 2020
- \$1.3 billion budget

University of California Merced Campus Expansion

The 2nd phase is currently under construction with completion in Fall 2019. Included are a wet laboratory building, dry computational laboratory and faculty office building, and a modular research server that will enable the electronic storage of research. This phase is adding 150,800 assignable square feet in size and includes new laboratory space, chemical stockroom, academic machine shop, faculty offices, 299-seat lecture hall, and arts-related performance lab for teaching and research.

The 3rd phase is currently under construction with completion in Fall 2020. This phase is adding 478,000 assignable square feet in size and includes a new wet-lab building with faculty offices and classrooms, 980 new beds in student housing, 630 new parking spaces, a conference center, a dedicated transit hub for buses, a new wellness center, an enrollment center, expansion of the existing Early Childhood Education Center, a swimming pool, three tennis courts and four basketball courts.

The commissioning process for this project is being executed seamlessly with the General Contractor's master project schedule. Our CxA formed a partnership with the General Contractor and Sub-Contractor Commissioning Coordinators to integrate commissioning activities into the master schedule and to document the startup, testing, and training processes. Regular meetings were held with project managers from all contracted trades, to keep the entire team informed of the start-up and commissioning process. Throughout the project, schedules were adjusted to coordinate all trade, testing agency and commissioning work efforts.

Buildings 1D, 1A/3B, 2B

Dining Pavilion & Mixed-Use Housing



Completion Fall 2018

161,000 Assignable Square Feet

3 LEED Gold Buildings

Facilities:

- Dining Pavilion
- 700 Bed Student Housing
- 940 Parking Spaces
- Sports Fields

Building 2B

Dry Computational Lab



Completion Fall 2019

150,800 Assignable Square Feet

2 LEED Gold Buildings

Facilities:

- Wet/Dry Lab
- Dry Computational Lab
- Classrooms & Faculty Offices
- Modular Research Server
- 299 Seat Lecture Hall
- Arts-Related Performance Lab

Building 3A

Biomedical Sciences & Physics Lab



Completion Fall 2020

478,000 Assignable Square Feet

6 LEED Gold Buildings

Facilities:

- Wet Lab
- Classrooms & Faculty Offices
- 980 Bed Student Housing
- Conference & Wellness Center
- 630 Parking Spaces
- Sports Fields

About Empowered

Empowered Solutions is a leading consultative energy solutions company founded and comprised of expert energy engineers, commissioning agents, controls system designers, and project managers. We help our customers capture their performance advantage through a unique blend of controls innovation, commissioning, and energy engineering expertise.