The foundation is set and the walls have been lifted, meaning completion of the College of the Canyons Canyon Country Campus’ first permanent building — the Applied Technology Education Center (ATEC) — is now only a few months away.

Scheduled for completion in late spring, the eagerly anticipated ATEC will provide students with hands-on learning and training opportunities in a variety of cutting edge subject areas, each with an emphasis on using “green” technology.

Including five classrooms and approximately 10,000 square feet of workshop and laboratory space, the new facility will consist of one permanent, tilt-up concrete building, along with four modular buildings and accompanying modular restrooms.

By using a tilt-up construction design — in which the building’s walls are poured directly at the jobsite into large concrete panels and subsequently moved into position around the building’s foundation — construction crews have been able to make rapid progress on the new facility.

COC programs slated to move into the ATEC upon its completion include: plumbing, electrical/electronics, construction management, water systems technology, automotive technology and solar energy technology.

“This facility will provide a home for several new programs which have been in development for a number of years,” said Dr. Dena Maloney, Vice President of the Canyon Country Campus and Economic Development. “The solar program in particular is one we have eagerly been planning for, which will equip our students with the skills needed to thrive in the emerging green economy.”

According to the January 2009 California Green Industries and Jobs report, solar energy technicians have been identified as one of the top two high growth green occupational groups, and thus will require the support of the state’s community colleges to provide training needed to help meet industry demand.

The construction of ATEC also comes at a time when the state’s utilities and power generation industries are adapting in order to meet new energy regulations that mandate a reduction in the dependence of nonrenewable energy sources.

Large-scale solar and wind farms are currently being built and operated throughout the state by major utility companies including Southern California Edison (SCE) and the Los Angeles Department of Water & Power.

As a result, SCE projects like the ongoing Tehachapi Renewable Transmission Project (TRTP) are already underway in an effort to upgrade existing transmission lines and substations in order to be able to connect these new renewable energy sources to homes across the state.

Along with the increased amount of renewable energy being generated will come an increased demand for a workforce of highly skilled solar technicians.

To help meet that projected need, College of the Canyons officials have already begun developing a series of career technical education (CTE) courses and training programs that...
will prepare students for a variety of different jobs within the solar power industry.

The college’s solar energy technology certificate program is expected to include program options in: photovoltaic (PV) panel installation, solar thermal installation, PV sales/customer service, weatherization and energy efficient technology, energy code compliance and energy auditing.

As an introduction to each program option in the energy series, all students will be required to take a one-semester “Introduction to Energy” course, which will include instruction in electricity fundamentals, alternative energy technologies, energy efficiency concepts and industry relevant mathematics.

After completing this course prerequisite, students can enroll in the program option of their choice, with most programs taking between one and two years to complete.

“All of these courses and program options are being developed in conjunction with local businesses and industry representatives to make sure the curriculum addresses the direct needs of the industry," said Kristin Houser, Dean of Career Technical Education at the college. “We want to turn out well-trained technicians who will be prepared to help meet the energy industry demands of tomorrow.”

In addition, the COC Fast Track Institute will eventually offer a selection of short-term, noncredit Green Technology training programs at ATEC.

Fast Track programs allow participants to quickly develop entry-level job skills and immediately begin working in local businesses and industries where applicants with up-to-date training are in high demand.

Green Technology employment positions and areas of interest to be addressed by the Fast Track Institute include: energy auditors; green plumbing for current plumbers; solar concepts for current electricians; and green demolition technicians.

“The Fast Track courses offered at ATEC will provide yet another way for students to begin honing their skills for the next generation of job opportunities,” Maloney said.