Arizona State University unveils new ‘dorm built for engineers’

Tempe, Ariz. – Engineering undergraduates moving into a new Arizona State University residence hall this week will find themselves immersed in a collaborative, technology-laden living and learning community built specifically for engineers.

The Fulton Schools Residential Community at Tooker House is a 1,600-person, co-ed residential community for undergraduate students in ASU’s Ira A. Fulton Schools of Engineering. The “dorm built for engineers” features on-site digital classrooms, state-of-the-art makerspaces complete with 3D printers, laser cutters, and design tools needed for a broad range of engineering courses and projects.

“Innovation has a new home address at Tooker House,” says Kyle Squires, dean of the Fulton Schools of Engineering. “This mixed-use living and learning facility sets a new standard in engineering education and reflects the breadth and depth of the student experience at the largest engineering school in the nation.”

Situated in a prominent location on the ground floor of the building, the maker lab allows students to work on class projects and explore ideas steps away from their living suites – essentially in their living room. The lab features sliding glass walls that encourage activities to spill outdoors, where exhibition pedestals enable students to present their work and invite discussion and feedback.

The seven-story, co-ed community was built by American Campus Communities on ASU’s Tempe Campus. The residence hall features a 525-seat dining facility, Bluetooth-enabled laundry rooms that notify you when your clothes are dry, advanced green building technology and enough high speed internet bandwidth to accommodate multiple devices per resident.

Elton Forlemu, an ASU civil engineering sophomore serving as a community advisor in Tooker House this fall, says “the work and study spaces are inspiring.”

Last year Forlemu lived off campus and spent hours studying and working in engineering classroom buildings, then traveling about 20 miles home to Glendale. He now envisions himself having late-night discussions in Tooker study spaces and then heading to the makerspace or computer lab to collaborate on a project “before it leaves your head.”

Architectural firm Solomon Cordwell Buenz’s design approach to Tooker House began with traditional desert architecture concepts as a starting point for creating a sustainable building that both feels appropriate to its context and can endure harsh desert conditions. The community features a complementary color palette of desert tones, using colors and materials that will resist fading and degradation under extreme UV exposure conditions.

The building’s most striking feature, hundreds of vertical perforated louvers on the south façade, each positioned according to a sophisticated algorithm, ensures daytime sunlight control unique to each
window’s location. Highly efficient glazing with significant shading capacity allow transparency and daylight without detriment to thermal performance and comfort. Metal window canopies and vertical metal louvers additionally shade windows from direct sunlight while preserving views.

“Last year, I watched the building process from skeleton to finished project,” says Forlemu, who aspires to build hospitals and large business complexes. “As an engineer, it was fascinating. What gets me is the infrastructure – there is such great use of space here.”

Tooker House also will play a prominent role as ASU expands its smart campus capabilities, incorporating sensing and energy efficiency analytics and other Internet of Things (IoT) technologies not only into the building’s operation, but also into the engineering program’s curriculum.

The new residence hall is named for Diane and Gary Tooker. Diane Tooker is an alumna of ASU’s Mary Lou Fulton Teachers College (BAE ’61) and a business owner and former elementary school teacher. Gary Tooker is an alumnus of the Fulton Schools of Engineering (BSE ’62) and a former CEO of Motorola. Together, the couple has made contributions to ASU through the ASU Foundation for more than 30 years, including support for the university’s teaching and engineering programs and the endowed Diane and Gary Tooker Chair for Effective Education in Science, Technology, Engineering and Math. Gary Tooker’s contributions to fostering Arizona’s tech sector were recognized with a lifetime achievement award presented at the 2012 Governor’s Celebration of Innovation.

Tooker House is owned and developed by American Campus Communities under the company’s ACE program, a public-private partnership that provides on-campus housing to universities without using their funds or tax-payer dollars. (www.americancampus.com).

About the Ira A. Fulton Schools of Engineering
The Ira A. Fulton Schools of Engineering, with more than 20,000 enrolled students, is the largest engineering school in the country, offering 39 graduate and 24 undergraduate degree programs.

About ASU Enterprise Partners and the ASU Foundation
ASU Enterprise Partners is a private nonprofit organization based in Tempe, AZ and made up of distinct entities, including the ASU Foundation, that raise, create and invest resources for the benefit of Arizona State University while advocating for and advancing ASU’s mission and brand (giveto.asu.edu).

About Arizona State University
Arizona State University has developed a new model for the American Research University, creating an institution that is committed to access, excellence and impact. ASU measures itself by those it includes, not by those it excludes. As the prototype for a New American University, ASU pursues research that contributes to the public good, and ASU assumes major responsibility for the economic, social and cultural vitality of the communities that surround it.

About American Campus Communities
American Campus Communities, Inc. is the largest owner, manager and developer of high-quality student housing communities in the United States. The company is a fully integrated, self-managed and self-administered equity real estate investment trust (REIT) with expertise in the design, finance, development, construction management and operational management of student housing properties. As of June 30, 2017, American Campus Communities owned 160 student housing properties containing approximately 99,000 beds. Including its owned and third-party managed properties, ACC’s total managed portfolio consisted of 197 properties with approximately 128,700 beds.

For more information:
https://engineering.asu.edu/tooker-house