

STEM program sweetened with a taste of campus living

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mccross3@tulane.edu



Henry Branch, Destini Renard, Jessica Xu and Asia Hentkowski, left to right, collaborate on the design and construction of a heat exchanger in a lab in Flower Hall. The students are enrolled in the Principles of Engineering course, part of the Tulane Science Scholars Program (TSSP) sponsored by the School of Science and Engineering. (Photo by Paula Burch-Celentano)

The [Tulane Science Scholars Program \(TSSP\)](#) welcomes 104 high school students from all over the United States and China this summer to take their first steps toward pursuing STEM careers.

Michelle Hewlett Sanchez, a Tulane alumna, professor of practice and director for K-12 STEM outreach for the [School of Science and Engineering \(SSE\)](#), leads the program in which participants enroll in two-week STEM undergraduate courses taught by Tulane faculty for college credit.

The program also provides need-based scholarships to students through generous donors. Sanchez says that this year, 70 percent of the scholarships were awarded to students from the Greater New Orleans area.

TSSP offers eight different three-credit science and engineering courses, ranging from classes examining animal behavior to neuroscience.

Katie C. Russell, a 2012 Tulane graduate and professor of practice in chemical and biomolecular engineering, is using her course to introduce students to fundamental principles of chemical engineering.

“Concepts are reinforced with labs designed to provide hands-on experience. For example, the students will have the opportunity to design, build and test a heat exchanger after learning about heat transfer in lecture,” she said.

Outside the classroom, students will also become well acquainted with other everyday aspects of university life, like managing their daily studies.

About half the students have also opted to live within the Willow Residences on the uptown campus.

“TSSP participants are registered Tulane students. This is not a summer camp. They learn to manage their down time in order to complete homework and study outside of class,” said Sanchez.

Students will also take faculty-guided lab tours, including a visit to [Maker Space](#), and will attend a “lunch-n-learn” speaker series, featuring guests like SSE board member Richard Mayer.

“We’re trying to open their eyes to as many STEM opportunities as we can during their time on campus. If students see how exciting science can be after the course, then we have been successful,” said Sanchez.

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