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San Jose State engineers a partnership

By Lisa M. Krieger
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MISSISSIPPI STATE DEAL ALLOWS SCHOOL TO OFFER PH.D.S

Prohibited by the state of California from creating its own doctoral degree program, San Jose State University has teamed up with Mississippi State University to offer engineering students a way to earn a doctorate while staying in Silicon Valley.

In the unusual cross-country collaboration, San Jose State students would pay bargain-price Mississippi State tuition and earn a Mississippi State degree, while studying and conducting research in San Jose. Lectures from Mississippi State's campus in Starkville, Miss., would be Webcast.

In turn, Mississippi State students would visit San Jose State to gain exposure to Silicon Valley.

"Our students are bright and hard-working, dying for the opportunity for more education — and businesses need people with advanced degrees," said Belle Wei, San Jose State's engineering dean. "This is a way to bring them together."

The "MSU/SJSU Engineering Ph.D. Gateway Program," announced at an ebullient signing ceremony at San Jose State's engineering building on Monday afternoon, will start in the spring.

Under the state's higher education "master plan," the University of California's 10 campuses are the only public universities in the state allowed to grant doctorates. The only exception, based on a 2005 state legislative decision, is for education doctorates. In

contrast, the mission of the California State University system is to provide undergraduate and master's degrees.

But because this is a "gateway program" — a cross between a correspondence school and foreign exchange program — San Jose State did not need to gain the consent of California's higher-education officials.

"Times have changed," Wei said. "The 'master plan' was written 40 years ago. Silicon Valley hadn't even been imagined yet."

San Jose State's College of Engineering has a huge student body, with 3,000 bachelor and 2,000 master's degree candidates. It is the largest provider of engineers to Silicon Valley companies.

But many of those students are unable to leave the region to gain further education — and are not academically qualified to gain entry to the University of California or Stanford University.

Mississippi State has only 250 master's and 200 Ph.D. engineering students. But its faculty have expertise in areas that San Jose State does not, such as computational fluid dynamics and advanced auto systems.

There are few local engineering jobs, however. Starkville, located in rural Oktibbeha County, has a population of only 22,000.

"Our students love Mississippi State — so much that they never leave," said Provost

Peter Rabideau. "San Jose offers diversity for our students, so they can see what is here in Silicon Valley."

Silicon Valley business executive James W. Bagley, a Mississippi State alumnus and namesake of its engineering college, helped initiate the gateway program.

Bagley is executive chairman of the board at Fremont-based Lam Research, a major supplier of wafer fabrication equipment and services to the world's semiconductor industry. Lam Research, under Bagley's leadership, is a supporter of San Jose State's College of Engineering.

Wei said many other universities approached San Jose State, but she was won over by Bagley's ongoing loyalty to both San Jose State and Mississippi State.

The University of California had been approached by San Jose State but had not stepped forward to commit itself to such an agreement, she said.

UC officials could not be reached Monday for comment.

According to the agreement, the two universities will waive their out-of-state tuitions. So San Jose State students would pay about \$4,000 a year to Mississippi State for their advanced degrees. By comparison, the average cost of tuition for a year of graduate school at UC-Berkeley is about \$8,000.

San Jose State has not yet decided how to recoup the costs of educating the students

on its campus, a San Jose State press spokeswoman said. She also would not release the exact terms of the agreement.

Bagley said: "This program will provide greater opportunities for qualified students of both universities. Growing the engineering graduate student enrollment at each of these institutions will help address the national need for more advanced-degreed engineers as well as enhance the stature of both engineering colleges."

Local technology companies are increasingly seeking workers with doctoral degrees, said David J. Hemker, vice president for new product development at Lam Research.

"Twenty years ago, it was not as necessary," Hemker said. "But now it shows us that innovative research has been done, and that someone is capable of time management and seeking out help. They've stuck it out."

Students can register now for the spring course work, Wei said.

"We can offer our students a degree — and offer the industry a workforce," she said.

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