College revs up for new building
But donations would allow for even more campus construction
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Since its inception in the 1960s, Florida Keys Community College has had a Marine Engineering building.

The single-story, concrete-floor structure with automotive bays that also houses welding art classes and faculty offices finally is going to be replaced with a new, $7.6 million state-of-the-art building with a marine design center, construction bays, propulsion labs and broadband access.

That Internet access will be paired with powerful computers that run computer-aided design software for engine schematics, boat building and vessel repair. Using the software, students will be able to design boats on a computer before they start building them, said William Miner, the welding and fabrication professor in the college's Department of Marine Engineering.

"We've needed it very badly," Miner said Tuesday of the 18,800-square-foot building set for groundbreaking in the fall. "The present propulsion building needs renovation badly. It's barely above flood level and it's most cost-effective to build a new one."

In addition to its age, the building is large enough for only four boats at a time; at times three or four students will be assigned an outboard or inboard engine on which to learn their skills, he said.

"Really what we're doing is a complete upgrade and overhaul of our facilities so we can work on engines in one area and fiberglass techniques in a separate area attached to the building," Miner said. The separation is important. The application of fiberglass requires chemicals that can be abrasive. Glass strands can float 100 feet and farther and get embedded under the skin. Students working on engines nearby can easily be irritated by the fiberglass, paint fumes or other chemicals.

Though the building is left open to ventilate airborne materials and paint fumes, the new building will have air systems to keep air clean and students cooler.

"The new building will have 10 bays," Miner said. "We'll be able to pull the boats under the building and raise the engines through a hole into the first floor and work in the air conditioning."

The new facility will include two- and four-cycle outboard testing tanks to run the water-cooled engines and a separate area for diesel engine repair, Miner said.

The classrooms, which will be on the second floor, will be wired for the Internet, too, with what Miner calls "smart classrooms."
"We can host virtual classrooms where students can work in real time with instructors online; we'll have interactive computer screens, computer aided design, and overhead projectors for teaching schematics and other blueprints," he said.

The building has been a longtime dream. The college requested $7.6 million in Public Education Outlay Funds for the new building three years ago. It received about $3 million in fall 2007 and the remaining $4.6 million last month when the Legislature included the money in the state budget, college spokeswoman Amber Ernst-Leonard said. "We held on to the first $3 million, but now that we have the rest, we can start building it," she said.

The building will take about 18 months to complete, Miner said.

The college will name the building after anyone who donates at least 50 percent of the construction and equipment costs, Ernst-Leonard said. Donations will allow the college to use the state money for construction elsewhere on campus.

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