If you were around campus just before graduation, you may have heard the beep beep of a golf cart and seen some students cruising at rather high speeds around the sidewalks. Those would be CAD Engineering grads taking their latest production out for a spin around campus.

The golf cart project is the invention of CAD instructor Ron Sorenson, who wants to make sure his students really do understand the connections between their CAD drawings and the finished product. The golf cart is the culmination of a team project for Reverse Engineering CAD IV. “This is a capstone course combining skills learned in engineering courses like Materials and Methods as well as machine tool and, of course, CAD drafting,” says Ron. CAD Engineering instructor Lloyd Lunde says, "This is an important project for the students going into the manufacturing industry as drafting technicians. It helps them to see the relationship between their drafting process and the actual manufactured part they are drawing. It’s always a challenge for the new drafting technician to see this relationship.”

To manage the project, the students disassemble the original cart and then set to work measuring every single part and drawing the parts in AutoCAD. Student Jordan Reekers explains, “We all drew several parts—we each had 18-20 parts. It all had to fit together when we were done. R.J. Shape says, “It was a challenge taking it apart and then putting it back together and making everything fit.” Eric Adamson agrees, “The hardest part was getting the right measurements and drawing the parts accurately.”

What drew them to this career? CAD comes naturally to Jaden Meyerink—it’s in the family. His father Duane owns Meyerink Farm Service. R. J. enjoyed a mentorship in high school where he took 3-D drafting, and Eric worked road construction, so he likes the combination of hands-on and computer drafting. Jordan had AutoCAD in high school industrial arts. “I build lots of things out of wood—cabinets, an entertainment center, and toy trucks.” Nick Schaefer says, “STI’s CAD Engineering program offered me just what I was looking for in a career. I took CAD classes in high school and enjoyed drawing blueprints.”

Continued on page 4
FLEXIBILITY AND RESPONSE TO CHANGE: articulation for six health programs approved!

Southeast has received approval from the Board of Regents to offer six of its two-year health programs in both forward and reverse articulation format. Director of Health and Human Services Patricia Bortnem says, “We are so proud of accomplishing this goal because it will make a major difference for students and employers! This gives our current students and our graduates options they have not had before. They can start here with health training and transfer to USD for their bachelor’s in science OR they can start at USD and transfer here for their specialized courses and clinicals.” Students will be able to earn an associate in applied science and bachelor’s degree. An added benefit is being able to take clinicals directly before employment. Students in the two-year health programs at STI spend over 1200 hours in approved affiliate sites all over the United States.

The entire process began when STI was selected as a pilot site by the Society of Nuclear Medicine to explore opportunities for STI graduates to obtain a Bachelor’s Degree in Nuclear Medicine. A growing number of hospitals (driven by accrediting requirements) are so proud of accomplishing this goal for over four years. “I think this will open the door to some extraordinary opportunities and pathways for our students and should be a win/win for both schools. I really appreciate Pat Bortnem for taking this idea and running with it, and I also appreciate administration’s openness to this concept.”

Doug Warner, Nuclear Medicine Program Director, has been involved in trying to accomplish this goal for over four years. “We are just being forward thinking. Plus, this opens options for those employed in the field who want to move into leadership positions.”

STI has a reputation for responding to its stakeholders by developing programs which meet their needs—and which maintain academic rigor. This latest agreement is just another example of commitment to the community. President Jeff Holcomb says, “This is a wonderful opportunity to collaborate with our university partners and meet the economic development needs of the region.”

The six programs—Cardiac Ultrasound, Diagnostic Medical Sonography/Abdominal/OB/Gyn, Electroneurodiagnostic Technology, Invasive Cardiovascular, Nuclear Medicine, and Vascular Ultrasound—have achieved national, specialized accreditations. And all produce graduates who excel on exams compared to peers nationally (See the table to the left). Doug Warner says, “I am extremely proud of our students. It is a difficult exam and they really rise to the challenge!”

Vascular Ultrasound Program Director Cathy Miller agrees, “These are tough boards! We are so pleased.”

**FLEXIBILITY AND RESPONSE TO CHANGE: articulation for six health programs approved!**

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<td>Vascular Ultrasound</td>
<td>STI: 89%</td>
<td>STI: 94.4%</td>
<td>STI: 100%</td>
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<tr>
<td>Cardiac Ultrasound</td>
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<td>STI: 94.4%</td>
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<td></td>
<td>National: 68%</td>
<td>National: 67%</td>
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<td>Invasive Cardiovascular</td>
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<td>National: 71.8%</td>
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<td>Nuclear Medicine</td>
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<td>STI: 73%</td>
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<td>National: 74%</td>
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ACTION PROJECT UPDATES

Every year, STI manages three Action Projects as part of fulfilling its commitment to AQIP accreditation. IT Efficiency, Student Success Center, and Comprehensive Training for Faculty are the three projects in the works, now.

#1 The Information Technology Team leads the planning and implementing of the IT Efficiency Action Project. In addition to upgrades and enhancements already accomplished, they will be focusing on the following projects over the course of this academic year.

- Upgrade to Campus Wireless Network and upgrading campus bandwidth
- Implementation of Higher Reach software for Business and Industry Department (BIT)
- Implementation of the ability for students to pay online
- Enhancements to STI website and continued enhancements to STInet
- Implementation of Virtual Desktops across campus

Director of Information Technology, Erik VanLaecken, says, “Our department continues to implement new technology initiatives which will continue to improve efficiencies on campus and move STI to the forefront of utilizing technology to improve learning.”

#2 The new Student Success Center is on schedule to open in fall 2011. A key piece of the Success Center concept is the program of Student Success Advisors and Student Success Seminar. A new Evening and Online Enrollment Coordinator who fulfills the role of another Success Advisor has been added to the team. Over the past year, our Student Success Advisors have taught the Student Success Seminar class to over 1,000 students and have supported many more students, assisting them with registration, overcoming personal obstacles, and developing student abilities to be successful in their education at STI. STI has established and provided over 60 emergency loans for students over the past year.

#3 The launch of a Comprehensive Faculty Training program has begun with the pilot of the expanded mentor class for new faculty. New faculty now receive five days of orientation versus one day. Vice President of Academic Affairs, Jim Jacobsen, says, “We are also expanding our Mentor Classes for new faculty from one to three years. The majority of our faculty come from industry and have great knowledge in their fields. The mentor class provides them with resources, knowledge, and skills to be successful in the classroom. And, an additional benefit is that new faculty have a chance to interact and share ideas.”

Jim adds, “We also assign new faculty a veteran mentor; this person serves as an additional resource to help with classroom skills and learn our policies and procedures. The goal for all these new initiatives is to help faculty engage learners and to help students be successful as they work to create workforce excellence.”

All three projects are designed to help an organization focus energy on areas that “will significantly advance its goals.” Our institutional goals are Promote Student Success, Foster Collaborative Relationships, and Leverage Resources. The projects are published on the AQIP web site and can be searched by organization, category or key word. http://www.hlcommission.org/Pathways/aqip-action-projects.html

STI must also maintain a continuous quality website for the public. Ours is on the STI net under Continuous Quality https://stinet.southeasttech.edu/ics/Continuous_Quality/. AQIP reviewers give official feedback on the Annual Updates posted in September.
AUTO TECHS EXPECTED TO PERFORM according to national standards

Auto Tech grads for 2010 achieved the highest end of year test scores for ASE the program has ever had—a new benchmark. Gene Heeron’s class took 46 tests and passed 45 for a 98 percent pass rate. Jon Clausen’s class passed 21 of 24 tests for an 88 percent success rate.

“I feel exuberant—this is a milestone which may be hard to achieve again,” said Gene.

According to Jon, these test results are important to employers. Says Jon, “Pat Amor, who is one of our Advisory Committee members, said he was impressed with the abilities of students as they go out into industry. And, at Sioux Falls Ford, they continue to hire our graduates because they are excited with the results our students achieve.”

The placement rate for Auto graduates has consistently averaged nearly 100 percent for the last several years.

WHAT IS Celebrating Student Learning?

Celebrating Student Learning was designed to share what we are doing in assessment, especially techniques faculty use to ensure that quality learning is happening. It’s our way of communicating to the public just how we measure learning and what is happening with our continuous quality process through AQIP.

We dropped the “A” word (Assessment) and use the terminology that really captures what we do – focus on student learning.

Check out our Continuous Quality page on STInet. That’s where our mission, vision and current strategic goals are published. Our newest AQIP Action Projects are IT Efficiency and Comprehensive Faculty Training. See https://stinet.southeasttech.edu/ics/Continuous_Quality/.

Drafting
Continued from page 1

Eric likes the idea that CAD gives him opportunities to design on the computer, work with clients, and also work with his hands.

“You have to be creative,” says Jordan, “and you have to be able to implement ideas to design and draw the parts the way they are going to be built.”

R.J. says, “We have to take an idea and put it into a realistic design.” Instructor Ron says, “These drafting techs are very important because they are liaisons between the engineers and shop floor.” Says Lloyd, “Employers tell us they want to see two things from our graduates. One is knowing the basics of drafting and manufacture. The other is the ability to visualize an object, create it in their mind, and to produce a working drawing from that visualization. This class helps the student to develop these skills.”

Just like all of the program faculty at STI, the instructors have direct industry experience. “Our teachers’ experiences implementing hands-on and using these AutoCAD programs makes the courses interesting,” says R.J. Those industry connections are very important.

Ron says, “The students also all participate in SME (Society for Manufacturing Engineers) which exposes them to industry experts.”

What’s in the future? Jaden will work with his father, and R.J. has accepted a job as a mechanical drafter at a local manufacturing firm. Eric, Jordan, and Nick all plan to work with manufacturing or engineering firms. “My dream job,” says Jordan, “is to work for John Deere. Everyone in my family (except an uncle who turned to the dark side) owns John Deere equipment. When I turned 16, I bought a $500 lawn mower instead of a car.” Maybe that dream will come true. With a placement rate of nearly 100 percent in the field, they shouldn’t have trouble finding jobs.