

REMARKS BY DR. G. WAYNE CLOUGH

GT Regional Engineering Program Meeting, Savannah, April 20, 1999

- Georgia Tech Regional Engineering Program to begin with the new school year next August. Excited about working in partnership with Georgia Southern University, Savannah State University and Armstrong Atlantic State University on their campuses and at the Coastal Center. Dr. David Frost who is developing this program is here with me. Want to share details with you this morning about how it will work and answer questions you might have.
- Long-time concern on the part of South Georgia that the engineering education needs of this region needed to be addressed. For a while that concern was expressed as a political question which could only be solved by making somebody unhappy. Then distance learning technology stepped into the breach and enabled us to rephrase the question.
- While technology has made South Georgia's need for engineers more critical than ever, technology has also provided the solution – making it possible to create a high-quality engineering degree program in South Georgia. A positive solution that brings our University System units together as partners.
- Coastal universities are already involved in distance learning partnerships. Armstrong Atlantic is one of nine universities that share resources to teach four core courses in gerontology using GSAMS technology. Both Savannah State and Armstrong State are part

of a seven-university collaboration that uses computer software and data files to enrich chemistry and biochemistry courses. GTREP goes a step further to offer full degree programs in engineering.

- Unique among distance learning partnerships around the state -- designed to have an economic impact. Goal is to ensure that this region of the state will be prepared not only to meet the technological needs of the future, but will be prepared to capitalize on the technological opportunities of the future. Chose civil and computer engineering to begin the GTREP because of a documented workforce need in coastal Georgia. Anticipate developing some new technical electives that are tailored to meet the needs of this region.
- Tremendous potential to do all kinds of things with this partnership, but right now we are clearly and specifically focused on creating successful, quality programs in civil engineering and computer engineering with an emphasis in software. Goal is to create a solid, well-designed model in these two areas that we can build on, and can be emulated.
- Cannot rely totally on distance learning for engineering education. Need for hands-on lab work, personal advising by faculty who understand technological implications, connections between coursework and workplace.
- Already have the foundation for this program in the Regents Engineering Transfer Program. 1st two years of Georgia Tech's engineering curriculum is already offered at Armstrong Atlantic and Georgia Southern, and Savannah State has now become also part of the RETP.

Students now transfer to the Tech campus as juniors on the same footing as engineering majors who have spent their first two years at GT. So the new part we are creating here is the junior and senior year curriculum for CE and CompE. With start of new school year on August 23rd, students who have completed 1st two years in RETP, able to continue with junior year here in Southeast Georgia without transferring to Atlanta.

- Program very similar to GT campus. Differences will come from taking advantage of unique strengths offered by our partners here on the coast and the unique opportunities offered by distance learning technology. DL technology enables: 1) Efficient use of existing faculty expertise from GT campus. 2) Asynchronous learning – not all students have to be in class at same time – attractive for non-traditional students. 3) Opportunity to enhance University System desktop distance learning network in conjunction with Regents office; front end of creating a model of a “virtual university.”
- Dr. Frost now meeting regularly with administration and faculty of 3 partner universities and GT civil and computer engineering faculty to lay groundwork. Will produce matrices of traditional and distance-learning courses that fit together to yield degrees. Will construct syllabi for new and revised courses.
- Will hire 4-6 GTREP faculty during next several months. Officially Georgia Tech faculty. However, most (70%) located here in the region, split equally between Savannah and Statesboro. Only 30% at GT in Atlanta. In coming school year they will teach courses for sophomores and for juniors who are right now completing 2nd year in Regents transfer

program. New faculty also to recruit and advise students, to develop the labs required by courses, and to interact with regional industries in preparation to develop internship and co-op opportunities.

- Freshmen to receive 100% of instruction at their local institution from existing faculty as they do now under the Regents Engineering Transfer Program. Sophomores will still get 80% of their instruction in the traditional RETP, but will now have the opportunity to broaden out a little into other courses available both from local Regional Engineering Program faculty and through distance learning. For juniors and seniors, these percentages will be reversed. Most of their courses will be taught by GTREP faculty based here in Southeast Georgia and through distance learning.
- Overall, in completing BS degree through GTREP, average student will get 50% of courses from present faculty at partner institutions; 30% through firsthand courses taught by new GTREP faculty here in the region; 20% through distance learning.
- General Assembly has provided \$1.5 million in remainder of FY99 (ends 6/30). 1/3 will begin hiring new faculty and provide for their needs. 2/3 will address up-front cost of renovating and equipping labs and distance learning classrooms. Team of computer and networking specialists in Savannah and Statesboro in March. Hardware and software choices will render the educational experience identical regardless of where student physically located.

- Budget for FY2000 (begins 7/1): \$2 million. Ratio of how it is spent is reverse of FY 99: Funding for faculty more than doubles to reflect full year's cost of salaries, supplies, etc.; funding for remaining renovation and equipment now becomes less than half of the budget @ \$800,000.
- Beyond BS in civil and computer engineering, next step is master's programs in electrical and computing engineering and in environmental engineering (coast is an environmentally sensitive region for which this expertise is important; can capitalize on the resources of the Skidaway Institute of Oceanography). Hope to be able to launch these programs officially sometime next fall/winter.
- Regard the three organizations in this room today as partners with us in Regional Engineering Program. GT always had very close, practical working relationship with business and industry, and want to do that here in coastal region as well. Understand need to prepare students for realities of actually practicing engineering in the private sector. Largest and one of oldest voluntary co-op program in nation. I was co-op student at GT – invaluable workplace experience as well as opportunity to earn way through school. Want students in GTREP to be able to co-op.
- Looking forward to enrolling first formal class of freshmen and identifying first sophomore and junior classes from the existing Regents Engineering Transfer Program. Expect the first graduates in 2002.