Georgia Tech Regional Engineering Program

G. Wayne Clough and David Frost

Board of Regents Meeting
May 8, 2002
Context for GTREP

• Georgia Tech mission: Statewide access to quality engineering education and support for technology-based economic development.

• Regents’ Engineering Transfer Program fills important role; building block for next step.

• Opportunity to build on existing collaborative relationships and economic development initiatives.

• 1998 need-based study demonstrated role for onsite delivery in Southeast Georgia.
A partnership effort from the beginning

Academic partner institutions:
Armstrong Atlantic State University
Savannah State University
Georgia Southern University
Skidaway Institute of Oceanography

Economic development collaborations:
Savannah Economic Development Authority
Coastal Business, Education, and Technology Alliance
Gulfstream Aerospace Corporation
Economic Development Institute
ATDC/Yamacraw
Guiding Principles for GTREP

- GIT focuses on junior/senior/graduate curriculum; partner institutions provide freshman/sophomore curriculum.
- Collaborate with Skidaway Institute of Oceanography for research and educational opportunities.
- Strategically build programs to optimize regional economic development opportunities.
- Develop technology hub linking Savannah, Statesboro, and other southeast Georgia communities.
Guiding Principles for GTREP (cont)

- Maintain GIT quality of students and faculty (among top 5 engineering programs in nation).

- Provide opportunities for faculty and students to engage in knowledge discovery and research.

- Use information technology to link institutions, provide students with maximum flexibility, and develop leading-edge model of technology-based education.

- Build new engineering education delivery model.
**Fall 2002**

**Undergraduate:**
- Civil Engineering
- Computer Engineering
- Electrical Engineering

**Graduate:**
- Civil & Environmental Engineering
- Electrical & Computer Engineering
- Mechanical Engineering

**Next Phase**
- Undergrad Mechanical Engineering
- Industrial Engineering
Faculty
First Graduates, December 2001

• 8 students graduated in December; 5 with honors
• 4 took EIT in October; all passed
• 5 now working in SE Georgia
• 7 more graduated May 4
• Triggers ABET accreditation process
Classrooms are designed to provide instructors and students with seamless high-quality interaction between sites.

Faculty keep students posted on class, assignment, and exam schedules using a wireless Palm Pilot network.
Resources for Students

Online chat labs for team projects

Faculty hold online office hours

Virtual Student Center
GTREP Research Projects

Nearshore impacts of offshore dredging

Technology for civil engineering field reconnaissance

Education technology
Community Commitments to TEC

- **SEDA:**
  - 46 acres valued at $2.4 m airport/interstate access
- **DOT**
  - $1.35 m in roads, sidewalks
- **City of Savannah**
  - $1 m in water/sewer extensions
- **SEPCO/BellSouth/Atlanta Gas**
  - $1.3 m utility infrastructure
Projected Enrollment Growth

- **Total**
- **Fresh/Soph**
- **Jr/Sr/Grad**
### Planning for Space Needs

<table>
<thead>
<tr>
<th>Timeframe</th>
<th>Space needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1</td>
<td></td>
</tr>
<tr>
<td>Fall 2003 -</td>
<td>75,000 GSF</td>
</tr>
<tr>
<td>Summer 2005</td>
<td>130,000 GSF</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Phase 2</td>
<td></td>
</tr>
<tr>
<td>Fall 2005 -</td>
<td>130,000 GSF</td>
</tr>
<tr>
<td>Summer 2007</td>
<td>175,000 GSF</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Phase 3</td>
<td></td>
</tr>
<tr>
<td>Fall 2007 -</td>
<td>175,000 GSF</td>
</tr>
<tr>
<td>Summer 2009</td>
<td>235,000 GSF</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Phase 4</td>
<td></td>
</tr>
<tr>
<td>Fall 2009 -</td>
<td>235,000 GSF</td>
</tr>
<tr>
<td>Summer 2019</td>
<td>275,000</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Additional 10,000 GSF needed for EDI, ATDC, Yamacraw*
Facilities for Phase 1
Fall 2003 – Summer 2005

Anticipated need: 104,000 GSF
Includes space for EDI, ATDC, Yamacraw

Proposal to meet the need:

GTREP Collegiate Center 17,000 GSF
Status: $5 m appropriated; Regents approved; purchase and sale agreement pending

Leased facilities 87,000 GSF
Status: GIT to seek Regents approval to lease needed space
GTREP Collegiate Center
Collegiate Center Floor Plan

17,000 sq ft