Georgia Tech Regional Engineering Program
Georgia Tech Savannah

Program Update and Proposed Operational Model
to Support Growth and Enhancing Quality

April 2005
Background
The mission of Georgia Tech Savannah is to provide world-class engineering education and stimulate economic development through the innovative application of educational technologies, innovative research and strategic partnerships.
FALL 1999

UNDERGRAD
CIVIL ENGINEERING
COMPUTER ENGINEERING

FALL 2004

UNDERGRAD
CIVIL ENGINEERING
COMPUTER ENGINEERING
ELECTRICAL ENGINEERING
MECHANICAL ENGINEERING

GRADUATE
CIVIL AND ENVIRONMENTAL ENGINEERING
ELECTRICAL AND COMPUTER ENGINEERING
MECHANICAL ENGINEERING
Distance Learning Technologies
• 7 distributed education classrooms
• 11 tele-collaboration studios
  – remote office hours
  – distributed senior design projects
• ECE instructional labs (complete)
• CE instructional labs (50% complete)
• ME instructional labs (25% complete)
Designed to provide instructors and students with seamless, high-quality interaction between sites.
Research Enterprise
Nearshore Impacts of Off-shore Dredging
Fast Quality Measure for Efficient Transmission of Textured 3D Models
Mammogram-Enabled Data Mining

**Data Mining Steps**
- Step 1. Form and submit query
- Step 2. Collect query return
- Step 3. Apply data mining tools

**Image Data Mining**
"Finding information with images"
- Data Mining Tool Box
- The New Image “Miner”

**Image Data Mining**
"Finding information with images"
- Data Mining of Case Histories
- Poster of individual microcalcification case histories and statistical analysis for autonomous attribution.
GTS Campus:
The Hub of a Growing Technology Community
Master Plan for TEC

GTREP COLLEGIATE CENTER
NORTH LEASE FACILITY
SOUTH LEASE FACILITY
GTREP CAMPUS FUTURE
Current Campus Occupants/Activities

- GTREP Undergraduate Programs
- GT Graduate Programs
- GT Faculty Research
- GT K-12 Outreach Programs – Public School Systems
- GT EDI Regional Office
- ATDC Savannah Incubator
- Maritime Logistics Innovation Center – Georgia Ports Authority
- Landing Parties for New Technology Companies
- U.S. Geological Survey – Savannah Field Office
- Industry Outreach Activities (Coastal Business, Education and Technology Alliance)
- GTRI – in Process

included in original GTREP concept
Growth and Initiatives
<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth in enrollment from FY04 (Jr/Sr undergrads)</td>
<td>+ 46%</td>
</tr>
<tr>
<td>Growth in enrollment from FY04 (grads)</td>
<td>+ 60%</td>
</tr>
<tr>
<td>Increase in number of undergrad courses being taught</td>
<td>+ 31%</td>
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<tr>
<td>% of undergraduate students graduating with honors degrees</td>
<td>~ 45%</td>
</tr>
<tr>
<td>Passing rate on Fundamentals of Engineering Exam</td>
<td>~ 95%</td>
</tr>
<tr>
<td>% of graduates obtaining jobs</td>
<td>~ 100%</td>
</tr>
<tr>
<td>% of graduates remaining in Southeast Georgia area</td>
<td>~ 65%</td>
</tr>
</tbody>
</table>
• 30 graduates in December 2004 – largest “class” [includes CEE/CmpE/EE; first ME graduates in May 2005]
• Research funding >$1.5M in FY04
• NSF international workshop on “Interval Mathematics”
• “InfinitEnergy” project making great progress
• Direct fiber connection to GT Atlanta >1 GB – mid 2005
• Additional leadership in next 3 months – Associate Chairs in CEE/ECE/ME
• Development activities meeting with success
• Buzz Store is open!
• Buzz Café is open!
Timeline of Program Activities

- August 1998:
  - Notice to proceed
  - Initiation of B.S. CompE
  - Initiation of B.S. CE
  - Development of infrastructure
  - First faculty hired
  - First formal classes

- August 1999:
  - Initiation of M.S. ME
  - First Tech-enrolled students

- August 2000:
  - Hub facilities relocated to Chatham Center
  - Initiation of M.S. ECE

- August 2001:
  - First graduates
  - Expansion of hub facilities at Chatham Center

- August 2002:
  - Initiation of Savannah Advanced Tech. Development Center
  - Expansion of hub facilities at TEC
  - Groundbreaking for GTREP Collegiate Center at TEC
  - Initiation of B.S. EE
  - Initiation of B.S. ME

- August 2003:
  - Hub facilities relocated to TEC
  - Accreditation review for B.S. CE and B.S. CompE
Thank You