"CENTERED"

Concepts for a New Engineering College Center

ENGINEERING COLLEGE COUNCIL

Meeting of April 10, 2003

Today's focus will be on:

- **Our Goal**
- **The Process**
- **Technology's Impact**
- **The Need for a Center**
- **Envisioning the "Center"**

Our Goal

To build a center that will be the gateway to the college and will enable learning, discovery, and creation supported by cutting edge technology.

The Process

- **We are at the beginning**
- **We have been here before**
- **The concept is different**
- **The urgency is greater**

Planning Partners

This presentation is a joint effort of:

Jim Bucko, *Director of Facilities*

Betsy East, *Assistant Dean for Student Services*

Mike Hayes, *Director of the Office of Research, Graduate Studies and Professional Education*

Terry Jordan, *Associate Dean for Undergrad Programs*

Cathy Long, *Assistant Dean for Administration*

John Saylor (On Leave), *Director of the Engineering Library*

Zsuzsa Koltay, *Interim Director of the Engineering Library*

Deborah Cox, *Assistant Dean for Strategic Planning, Assessment and New Initiatives*

Technology's Impact

- **Access to vast amounts of information**
- **Distributive learning**
- **Global connections**
- **Electronic dialogue**
- **Speed of communication**
- **Need for new skills to use technology**

Current Situation

- **Student Services in 3 buildings**
- **Library overcrowded/outdated**
- **Outdated technology**
- **No graduate student facilities**
- **Insufficient administrative space**
- **Need to restore green space**
- **Carpenter Hall (1957) limitations**

Carpenter Hall

- 100 Workstations
- Printers/Scanners
- Laptop Borrowing
- 243,000 volumes
- 2 million microfiche
- 1500 serial subscriptions
- 5 Classrooms

Fundamental Change

- Increased need/demand for service

- Need to keep pace with and support technology

- Renewed focus on personal interaction

- Emphasis on effectiveness/efficiency

- Reality of constant change

- Need for flexibility/adaptability

The Center will Combine

1. Leadership
2. Learning   Technology
3. Information
4. Service
5. Community

1. Leadership

- **College presence/gateway**
- **Administration**
- **Development and Alumni Affairs**
- **Cornell Society of Engineers**
- **Student association space**
- **Central network/data management**

2. Learning

- **Technology-assisted learning**
  - Workstations/software
  - Computer aided, self-guided study
  - Capability to digitally enhance assignments/projects
  - Infrastructure for distance learning-professional education
- **Individual and group study space**
- **Program space**
- **Classrooms/training space**
- **Project/research team space**

Project Astro

Aerospace Systems Technology and Rocket Operations

Goal: Construct a fully functional autonomous landing vehicle with liquid propellant rocket engines and test it on earth

Team: Multi-disciplinary group of 54 students from six fields

Structure: Three sub-teams – electrical, mechanical and business

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And maybe with…

- Project office space

- Assistance with team development/management

- Easy corporate connections

- Just-in-time access to information

- Technology supported design

- Showcase space to feature accomplishments

ASTRO will reach their goal……

3. Information

- **Profound shifts in information access and storage:**
  - Ownership to access
  - Print to digital
- **Space for equipment**

- **Storage for non-digital collections**

- **Active and quiet space**

4. Service

- **Admissions**

- **Advising**

- **Career assistance**

- **Digital media services**

- **Guidance in information discovery, evaluation and management**

- **Student records and processes**

5. Community

- **Public space for community connections**
- **Conference center**
- **Café/eating area**
- **Presentation space**
- **Meeting space**

Next Step – Benchmarking Our Peers

To be competitive we must merge our strong legacy of exceptional research, education and engagement with a technologically advanced facility.

University of Illinois

- 92,000 sq. ft
- Seats 1,200
- 1,000 networked computer connections
- Multi-media and instructional services labs
- 350,000 volumes of library materials-online catalog
- Individual and group study areas
- Conference and seminar rooms

**Grainger Engineering Library and Information Center**

Princeton's Friends Center for Engineering Education

Princeton's Friends Center for Engineering Education

- 70,000 sq ft - Library occupies 40% of building

- Connected to Computer Science facility

- Classrooms supported by technology

- Group and individual study rooms

- Public PCs with data connections/laptops available

- Power and data connections at every seat and table

- Document workstations (CD, Scanner, Zip Drive)

- State of the art computer studio

Stanford's Green Library
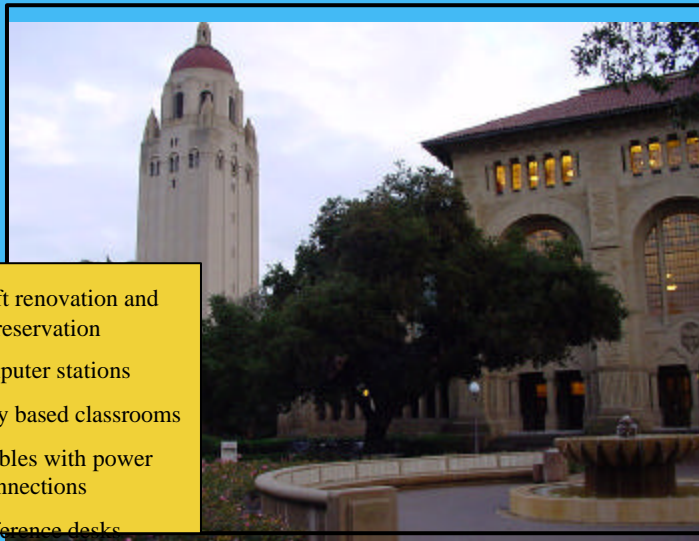
- 30,000 sq ft renovation and historical preservation

- Kiosk computer stations

- Technology based classrooms

- Reading tables with power and data connections

- Service/reference desks

Univ.of Georgia Learning Center

— "the Student Learning Center is unique - no other building at any — University integrates classrooms and library space as this building will"
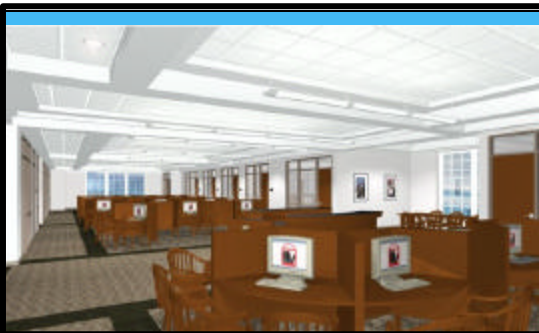
Interior of the Learning Center

- Electronic teaching library (100,000 sq. ft)
  - 500 networked workstations
  - 2200 seats
  - 96 group study rooms
- Coffee house
- Soft seating
- A traditional reading room
- 26 Electronic classrooms with seats for 2200 students

University of Georgia

Summary

- **Confluence - Library, learning, and leadership**
- **Connection-Wireless technology**
- **Consolidation - Student programs, resources, services, and technology**
- **Convergence - One to one/many to many**
- **Conservation – Optimize all we do**

The Invitation

Please join our students in today's breakout session

to begin to envision

"The Center"

Questions/Comments