

**STRATEGIC PLAN
FOR
THE COLLEGE OF SCIENCE AND TECHNOLOGY
THE UNIVERSITY OF SOUTHERN MISSISSIPPI
adopted
March 2004**

Introduction

The purpose of this strategic plan is to clearly define the overall mission and goals of the College of Science and Technology. The mission of the College is: 1) to provide quality education in the science and technology areas, 2) to promote world-class research, 3) to actively promote diversity as a means of improving educational opportunity, and 4) to promote economic development in strategic areas.

In support of the mission, the goals of the College are to continue providing high quality educational opportunities, increase enrollment, increase research funding, increase developmental giving, and to grow in national stature and reputation. To summarize, the overall goal is simple: to be one of the best colleges of science, engineering, and technology in the country.

Background

The College of Science and Technology is already an outstanding academic organization. This College has approximately 3,000 majors (2,500 undergraduate and 500 graduate) and 170 faculty FTE. The College teaches approximately 20% of all student credit hours. The College generated approximately \$40,000,000 in external funding in 2003 fiscal year, 60% of the university total. However, despite this enviable record, the College is not meeting its full potential. The programs in the College range in quality from world-class to under-performing. We should not be satisfied until every program in the College has reached its fullest potential.

Specific Numeric Goals

The goals delineated below will be met over the **next five years**, i.e. before 2009.

- Increase research funding from \$40,000,000 to \$100,000,000
- Increase graduate enrollment from 500 to 1,000
 - The bulk of this increase will be in research assistants
- Increase faculty from 170 to 250
 - The bulk of this increase will be in research faculty
- Increase number of faculty Fellows from 6 to 15
 - 2004: Chemistry-1 fellow, Polymer-2 fellows, Biological Sciences-2 fellows, Math-1 fellow
- Increase number of faculty members in National Academy of Science from 0 to 3
- Increase undergraduate enrollment from 2,500 to 3,000
- Increase Goldwater and Rhodes scholars from College from an average of 1.5 annually to 4 annually
- Establish 3 engineering degree programs with ABET engineering accreditation

- Increase percentage of minority faculty from 2% to 15%
- Increase percentage of female faculty from 16% to 40%
- Increase percentage of minority graduate students from 9% to 30%
- Increase average number of patents filed annually from 3 to 8
- Increase three year average of developmental giving from approximately \$1M/year to \$5M/year

I. **Mission:** To have internationally recognized research programs.

- a. **Goal:** To increase the level of external grants from \$40,000,000 to \$100,000,000.
 - i. **Action Items:**
 1. Increase number of proposals submitted and awarded
 2. Increase participation on multi-disciplinary proposals
 3. Increase number of post-docs supported on grants
 4. Identify and develop adequate research space
- b. **Goal:** Double number of graduate students over next 5 years
 - i. **Action Items:**
 1. Increase graduate student recruitment efforts
 2. Increase funds available for graduate scholarships
 3. Increase TA stipend allotments by supplementing with departmental allotments (e.g., F&A, salary recovery, foundation monies)
- c. **Goal:** Increase faculty lines from 170 to 250
 - i. **Action Items:**
 1. Add research faculty lines to proposals
- d. **Goal:** Increase national stature and reputation
 - i. **Action Items:**
 1. Submit worthy candidates for Fellow and National Academy membership
 2. Establish three engineering degree programs with ABET engineering accreditation
 3. Increase submissions of Goldwater and Rhodes scholars from College
 4. Increase number of post-docs by 30

II. **Mission:** To have a high quality teaching programs.

- a. **Goal:** To increase the number of undergraduate majors from 2,500 to 3,000
 - i. **Action Items:**
 1. Increase undergraduate student recruitment efforts
 2. Increase funds available for undergraduate scholarships
 3. Increase external research funding to support additional undergraduate research positions
- b. **Goal:** To provide high quality service course education
 - i. **Action Items:**
 1. Establish a College Learning Center for tutoring in basic science and mathematics
 2. Increase lab fees to enhance educational technology area
 3. Institute teacher training courses to improve instruction

III. **Mission:** To promote diversity through proactive efforts to recruit and retain members of traditionally under-represented groups into scientific and technological fields.

- a. **Goal:** To increase the levels of science and technology participation for members of traditionally under-represented groups

i. Action Items:

1. Use scholarship programs to recruit women and under-represented minorities into science and technology
2. Establish the fully-funded position of Assistant to the Dean for Strategic Initiatives to assist in recruitment
3. Reward departments that recruit qualified women and minority faculty applicants with new faculty lines

IV. Mission: Promote program quality through economic development activities

a. Goal: Increased interactions with industry

i. Action Items:

1. Pursue collaborative research endeavors
2. Establish on-campus research institutes with close industrial ties
3. Take steps to create and protect intellectual property
4. Pursue additional student internships

a. Goal: Increase three year average of giving from approximately \$1M/year to \$5M/year

i. Action Items:

1. Pursue support for new buildings
2. Pursue funding for endowed faculty chairs
3. Pursue Foundation support for research
4. Establish college and unit based Alumni Advisory Councils
5. Establish college and unit based newsletters and brochures