

Chapter 7C: Facilities Plan

Starting Points

Adequate facilities are critical to the continued growth of the College of Engineering's academic and research programs. Our objective is to:

Objective: **Develop an infrastructure that will support excellence in academic programs, student services, research, scholarship, and outreach. The infrastructure will facilitate interdisciplinary programs and will serve the needs of faculty, staff, students, and stakeholders.**

The College of Engineering's facilities include the Engineering Building, Glover/Engineering South, the Atmospheric Science/CIRA Complex at the Foothills Campus, the Simons Building at the Engineering Research Center, the Engines and Energy Conversion Laboratory on College, the Motor Sports Research Center, and several other office complexes or small buildings. A description of facilities and their primary use appears in Table 7C.1. College of Engineering facilities are of varying quality. In addition, these facilities often do not include adequate space to house graduate research or teaching assistants or to support undergraduate student services. In many instances, research groups are located in multiple locations or may be required to move between buildings to conduct research.

Colorado State University's strategic plan includes goals to:

- ✘ Increase the size of our faculty by 200 to 300 by 2010,
- ✘ Increase our undergraduate enrollments by 2% per year,
- ✘ Increase our graduate enrollments to 4,400 by 2010,¹ and to
- ✘ Increase annual research expenditures to \$276M by 2010.

These goals are consistent with College of Engineering goals to increase faculty size, graduate and undergraduate enrollments, and research expenditures. To reach these University goals, we must develop new facilities to house faculty, students, and programs. College of Engineering goals are to:²

Goal: Develop a technology quadrangle including the Colleges of Engineering, Business, and Natural Sciences to facilitate joint academic, research, and outreach programs,

Goal: Develop facilities of adequate size and quality to support undergraduate academic programs and student services in the College of Engineering,

¹ Fall 2005 graduate enrollments were 3,626.

² This strategic plan focuses on facilities. Future plans will examine needs for laboratory and equipment support.

Table 7C.1 Summary of Current College of Engineering Facilities

Building	Primary Occupants
Main Campus	
Engineering Building	Deans' Office; COE Business Office; Departments of Civil Engineering, Mechanical Engineering, and Electrical and Computer Engineering
Glover/Engineering South	Departments of Chemical and Biological Engineering and Civil Engineering; Engineering Network Services
General Services Building	Department of Civil Engineering Offices (Garcia)
Aylesworth Hall	Offices for COE Media/Public Relations
Foothills Campus	
Simons Building (and related structures)	College of Engineering research facilities; EUV ERC
Atmospheric Science Building/Complex	Department of Atmospheric Science
CIRA Building	Cooperative Institute for Research in the Atmosphere
Atmospheric Chemistry Building	Department of Atmospheric Science
SIM Lab	College of Engineering
Motor Sports Research Center	Department of Mechanical Engineering
Other Locations	
Veterinary Teaching Hospital	Orthopedic Biomedical Engineering Research Laboratories (James and Puttlitz)
Engines and Energy Conversion Laboratory	Mechanical Engineering's Engines and Energy Program (Willson)

Goal: Create research space on the main campus for the College of Engineering's two NSF Engineering Research Centers (Extreme Ultraviolet Laser Research Center and Collaborative Adaptive Sensing of the Atmosphere),

Goal: Create facilities that will allow the development of an interdisciplinary program in biomedical engineering by co-locating faculty and students,

Goal: Create adequate and safe laboratories for undergraduate teaching and research for students in the Department of Chemical and Biological Engineering,

Goal: Create facilities that will support the development of the ISteC supercluster and will result in co-location of the Departments of Electrical and Computer Engineering and Computer Science and will be close to the Department of Computer Information Systems,

- Goal:** Develop a plan that will allow faculty, staff, and students in the Department of Computer Science to be located within this technology quadrangle and near the Departments of Mathematics and Statistics as soon as reasonably possible,
- Goal:** Develop adequate new space on campus to free up the Glover Building to meet needs within other colleges,
- Goal:** Preserve space adjacent to Rockwell Hall for expansion of the College of Business and to preserve “green space,”
- Goal:** Provide space within this technology quadrangle to support economic development initiatives within the College of Engineering and Colorado State University as a whole,
- Goal:** Develop facilities that will support joint efforts among the Colleges of Engineering, Business, and Natural Sciences such as the Global Innovation Center, Entrepreneurship Center, and the Water Center,
- Goal:** Create a “signature building” and new entrance to Colorado State University.

In addition, there is a need to develop the Foothills Campus to support the College’s research programs. Our goals are to:

- Goal:** Develop new research facilities at the Foothills Campus to support and expand the College of Engineering’s extraordinary research productivity.

Strategies:

- ✘ Leverage investments of student fees, university resources, and gifts to construct a new 150,000 ft² building at the location of Green Hall on the main campus,
- ✘ Construct a new facility in support of the NSF MMAP Science and Technology Center (proposed) at the Atmospheric Science Complex, and
- ✘ Create an Engineering Research Complex at the location of the Simons Building. This will require remodeling of current space and development of new laboratory and office facilities.

Metrics:

- ✘ Construction and renovation of facilities.