Vision
Program Outline

Issued April 2, 2001
Scope
This document is a summary of the Vision Session for the Advanced Computing Technology Building. This session was held on February 22, 2001. The document contains the key goals and planning parameters that set the stage to develop a facility on the Georgia Institute of Technology campus intended to house programs related to computing and computer engineering.

Purpose
The purpose of this Vision Program Outline is to outline our understanding of the visionary ideas and key program elements that will serve as a basis for developing a detailed building program for this facility. This overview sets the stage for the next phases of this scope of work: an Initial Program Development document and the development of a Final Program document. As part of this initial step, the team addressed the objectives of the Institute, discussed the input received from each unit and prepared a combined vision for the use of this facility. This document is issued for review and approval.

Resources
The information presented was originally gathered from data prepared by the Institute during the Pre-Planning stages of this project. Additional information was gathered through individual meetings with key members of the team and information collected by way of a Vision Questionnaire.

Contents
This document contains:

- **Scope Overview** provides an overview of the project's objectives as related to Georgia Tech's mission, description of the intent of the project and programs to be housed.

- **Mission** provides a summary of the mission of this building.

- **Success** sets clear guidelines for what constitutes a successful project.

- **Role** describes the functions the building must perform within the context of the Institute and each unit.

- **Values** are attributes of the physical environment the building must sustain.

- **Parameters** are facts or constraints that define the limits of the scope in terms of site, size, cost and schedule.

- **Appendix** contains detailed data collected and developed to support the information presented in the findings.
  - **Issues**
Client
The Georgia Institute of Technology, under the direction of the Office of Facilities and in collaboration with the College of Computing and School of Electrical and Computer Engineering

Consultant
For this phase of the work, Sizemore Floyd, LLC provided management, programming, planning and conceptual design services. Additional consultants included Einhorn, Yaffee and Prescott.
SCOPE OVERVIEW provides an overview of the project’s objectives as related to Georgia Tech's mission, description of the intent of the project and programs to be housed.

I. Statement of Design Objectives and Criteria, in agreement with Ga. Tech’s mission and objectives, Strategic Plan and Campus Master Plan

This facility is to be an interdisciplinary computing technology building that will accommodate the College of Computing (CoC) and the School of Electrical and Computer Engineering (ECE). The project is consistent with the objective to support instruction and research in areas of economic importance to the State of Georgia as well as a commitment to improve facilities and infrastructure to support modern instruction and research methods.

The facility will be located on one of the two sites originally identified in the master plan. In this case, the selected site is immediately adjacent to those facilities that house key administrative and instructional functions for the College of Computing and Electrical and Computer Engineering. The selection of this site provides an opportunity to develop an entire sector with a focus on these two functions.

2. Description of program and curricula to be housed

College of Computing and the School of Electrical and Computer Engineering will be the primary occupants of this building. The institute's multi-year capital plan identified as a high priority the need to have this interdisciplinary computing technology facility, accommodating 50 to 60 faculty from both programs. The building will accommodate laboratories, classrooms and offices for these two units as well as some “common” spaces that serve not only the units in the building but other campus users. There was significant discussion regarding whether to include the main administrative offices in the building, as mentioned by ECE. This issue was not fully resolved, however there was consensus that if any significant administrative presence were to be included in the building that both units should be represented to avoid the perception of ownership by one unit.

3. Describe intent of project

The facility will rectify existing facility gaps and address portions of future growth. It will foster interdisciplinary activities that involve CoC, ECE and other units. In addition, it will play a key role within the context of the physical sector in which it is located.
MISSION provides a summary of the mission of this building.

Above all, this facility’s mission is to provide the physical environment that supports the collaborative efforts of the College of Computing and the School of Electrical and Computer Engineering. Specific functions to be housed include research laboratories, office, office support, classrooms and informal gathering spaces.

Other pertinent aspects of the Mission are documented in the following images.
COOPERATIVE RESEARCH

FOCAL POINT FOR CoC
CONSIDER

LARGE ASSEMBLY

> 100 SEATS
SUCCESS sets clear guidelines for what constitutes a successful project.

“The individual peace of mind that is the direct result of self-satisfaction in knowing that both, individually and collectively, we did the best that we are capable of doing to make real the vision for this building.”

Success in this project will have been achieved when:

1. The ability of the building’s occupants to excel at what they do is maximized.

2. The occupants enjoy working in this building.

3. The existence of this building improves conditions for all members of CoC and ECE.

Recurring “themes” related to success:

- A facility that allows the occupants to operate in “real life” atmosphere
- Space that is flexible
- Focus on “high quality” space
- Community
- Creating casual hang out areas close to accessible and open work space
- Create opportunities for interdisciplinary interaction
- Create an image that is impressive architecturally, technologically, and functionally, but not at the expense of space
Provide some spaces

Office = Lab = Applied Research

People want to come/visit building
ROLE describes the functions the building must perform within the context of the Institute and each unit.

- To set the standard for the university of the future.
- To create an Interdisciplinary I. T. complex
- To target a “bronze” level of LEED rating
OCCUPANTS

ECE  CoC  CR.

LOCATIONS

KLAUS  GCATT
COB  YAMAGAWA

Vision. II
VALUES

VALUES are attributes of the physical environment this building must sustain
PROVIDE A TECHNOLOGY ENABLED FACILITY

"COMMUNITY"

- PHYSICAL PROXIMITY
- WORK IN GROUPS

"CLUSTERS"
GOAL: ELIMINATE

COG

KLAUS

PHYSICAL BARRIERS

GOAL:

PROJECT-ORIENTED

FACILITY
Provide Integration

Research

To provide a sustainable building.

LEED certified (practical).
"KEEP THE WALLS LOW"

PERMEABLE SUB-GROUPS

FLEXIBILITY IN FORM
PARAMETERS are facts or constraints that define the limits of the scope in terms of site, size, cost and schedule.

Site
The building will be located on a site in the heart of the Georgia Institute of Technology. The site is directly east of the College of Computing Building, across Plum Street. The site is approximately three acres in size. It is bound by Plum Street on the west, by Ferst Drive on the north and east and by a parking lot on the south. The site extends over two different parcels and has two existing buildings and a street on it.

The scope of the project budget set to date includes demolition of the existing buildings, utilities to support the new building and the need to upgrade or add a new chiller unit and the integration of the Fifth Street segment.

Budget:
A total of $41.3 million is the target for Total Project Cost. Total Project Cost is comprised of the total cost for construction, a resident inspector, architectural and engineering services, loose equipment, special cost associated with the demolition and chiller and a contingency. The sources of funding for this target include $33,000,000 from the State of Georgia and approximately $8,000,000 from private sources.

A total of approximately $33 million is the target for the Construction Cost of the building. The construction cost includes the building and immediate site.

Size:
Assuming a cost of $210 to $230 per gross square feet of total project cost, it is estimated this building will be sized to house approximately 180,000 to 200,000 gross square feet. In order to respond to the institute’s master planning guidelines, the height of the building should be between three to five stories.

Schedule:
The facility is intended to be occupied by Fall 2005. The site will be available to start site preparation work in October 2002.
Appendix contains detailed data collected and developed to support the information presented in the findings.
ISSUES

Will “clean rooms” be a part of the scope of this project?
No.

Will there be diversity in the size of the faculty offices?

Will Plum Street be abandoned by the City of Atlanta?
How long will it take to finalize this?

What is the status of the sector plan?
What guiding principles will apply to this project?

Should there be one or multiple arrangements for laboratories as related to offices?
Multiple.

Will there be food service?
Possibly coffee cart-style service.