

SCHOOL OF ARCHITECTURE

VISION PLAN AY 2006-2007



BY: ERIC HEPBURN
DIRECTOR OF INFORMATION TECHNOLOGY
EHEPBURN@AUSTIN.UTEXAS.EDU
512.694.7067

IT Mission:

The School of Architecture is dedicated to providing secure, reliable, and relevant information technology to its students as an integral part of our educational mission. The ever-increasing use of and reliance upon computing technology within the School and in the professions that we teach make the seamlessness of this integration, and its success, all the more important.

Summary of Requests

Recurring:

Cyclical Replacement of Equipment **\$80,000**

The increasing utilization of Computer Lab, IO Central, and Studio computing resources in combination with the growing computational power required by contemporary modeling, analysis, and visualization software necessitate the continued funding of student computing resources in the School.

Software Acquisition & Licensing **\$50,000**

Our commitment to providing students with access to the various design, analysis, and visualization software packages used in industry is a linchpin to their successful professional education.

Network Infrastructure **\$30,000**

The expansion, maintenance, and cyclic upgrade of existing networks in the School's four buildings is critical to fulfilling our mission.

Computer Lab and IO Central Staff **\$36,000**

In order to provide the necessary level of service for the Computer Lab and IO Central (our central printing, plotting, scanning, equipment checkout, and helpdesk facility), we are committed to hiring Graduate Assistants for approximately 1000 hours per long semester (in addition to the 6 teaching assistant positions provided by the School for this purpose).

Digital Fabrication Maintenance **\$10,000**

In order to protect the School's significant investments in Digital Fabrication, recurring funding to provide maintenance contracts on our hardware, software, and systems is required.

New Recurring Requests:

Operating Systems Specialist (FTE) \$55,000

The funding for this position and the commitment to its recurrence are vital to the ability of the School to meet its critical educational needs. This request is consistent with the Provost's commitment to provide additional support infrastructure for the School's new degree programs, our substantial increases in graduate student enrollment, and with the stated need for additional IT staffing in the School's previous vision plans. We are also evaluating the possibility of filling this need with funding from differential tuition; however, our application for differential tuition was declined last year and has not yet been approved for next year.

Project Requests:

Digital Fabrication \$150,000

The capacity to iterate designs between the physical and digital dimensions is one of the most exciting areas of growth in the School. Upcoming phases in our implementation of digital fabrication facilities include the acquisition and installation of a five-axis large-format CNC Router and 3D digitizer technology at both the model and built environment scales. We believe that these technologies are essential to keeping current with architectural practice and the growing emphasis on digital design and fabrication within the field. This funding request is consistent with discussions between the Dean of the School of Architecture and the VP for Information Technology.

Computer Lab & IO Central Furniture \$60,000

In order to provide an appropriate environment for our students to work in, we need to upgrade the seating and desks in the Computer Lab to durable and ergonomic workstations and chairs.

Classroom & Review Presentation Systems \$35,000

Our two large auditoria are in need of a serious technological overhaul, including a systems redesign and the acquisition and installation of new equipment to improve the usability and reliability of the teaching technology. In addition, we plan to upgrade at least one review facility with projectors so that digital-intensive studios will have a review facility appropriate to their design and presentation methodology.

Sutton Hall Infrastructure Upgrade \$50,000

The partial network upgrades in Sutton Hall over the past two years have been very successful. However, this partial solution has only emphasized the need to complete the installation of a full Structure Cabling System within Sutton Hall.

Total ITAC Funding Request: \$556,000

Unallocated AY 2005-06 Project Funds*: \$100,000

Modified ITAC Funding Request: \$456,000

- Note: The additional \$100,000 in one-time ITAC Project Funding that was awarded in AY 2005-06 has not yet been allocated across the projects listed above. We are still in the process of evaluating and leveraging alternatives.

Technology Infrastructure and Support Services:

Computer Lab

The School of Architecture Computer Lab, located in Sutton Hall 1.102, provides dedicated computational, input, and output resources to all students enrolled in classes within the School. There are over sixty standard PC workstations, sixteen standard Macintosh workstations, and seventeen special application or peripheral workstations. The computer lab is open and staffed for 104 hours per week during long semesters, from 8:00 AM to Midnight Sunday through Thursday and from 8:00 AM to 8:00 PM on Fridays and Saturdays.

IO Central

IO Central contains the centralized printing and plotting equipment for the School, large format scanning, equipment checkout (including digital cameras, LCD projectors, and laptops), and provides a central location for students needing IT assistance. The facility adjoins the Computer Lab and has the same hours of operation. It houses a central print server with queues for the various printers and plotters; including eleven plotters, 2 color laser printers, 2 black and white laser printers, a 42" large format scanner, and an InVision Si2 3D printer.

IO Staff

The Computer Lab and IO Central are staffed by graduate students. Six of the positions are funded by Teaching Assistantships, while the other six are paid as salaried Graduate Assistants from ITAC funds. One of the significant changes we have made is to have two IO Staff on duty during most lab hours to provide better support and service to the student user population.

Design Student Computer Policy

The School has implemented a student computer policy for all undergraduate and graduate students enrolled in our design degrees: architecture, interior design, and landscape architecture. The students are required to provide a laptop and specific design software. Support of this initiative is provided by requiring extended warranties for hardware issues, leveraging the ITS helpdesk for general hardware and software issues, and providing design application assistance through the IO Central.

Technology Classrooms

The School has two auditoria, seven classrooms/seminar rooms, and two studios with installed projection systems.

Network Infrastructure

Goldsmith Hall has up-to-date networking infrastructure, with a Gigabit backbone, Fast Ethernet to the desktop, and a Cat-5e SCS. The West Mall Building and Battle Hall have been updated to Fast Ethernet networks thanks to generous donations of old network equipment from ITS and the Department of Computer Sciences, their legacy Cat-5 cabling is now at its maximum potential. Sutton Hall has had a partial network upgrade but still requires completion of the SCS and additional network equipment to bring it up to campus standards.

IT Staff

Director of Information Technology (Senior Systems Analyst)

Responsible for IT vision, management of IT staff, administration of ITAC and special equipment budgets, network administration, Server administration, software licensing and distribution, Computer Lab and studio workstation administration, computer support as described below.

Assistant Director of IT (Network Analyst)

Faculty and staff computer administration, Computer Lab supply management, security implementation, inventory, BevoBucks and print charging administration, and computer support as described below.

Webmaster

Design and administration of the School of Architecture web site.

Table of Computer Support Escalation			
Tier \ Area	Computer Lab	Studios	Faculty/Staff
1	IO Staff	IO Staff	Asst. Dir.
2	Asst. Dir.	Asst. Dir.	Director
3	Director	Director	

Proposed – Operating Systems Specialist

This position would take over Computer Lab and Studio computer administration, lower level server administration, practical software distribution, and second tier computer lab and studio computer support.

Funding:

Information Technology Fee (ITAC)

The School is grateful for the generous funding that ITAC has provided over the years, in particular the special \$100,000 in project funding awarded last AY. ITAC is the primary budget used to provide the student computing resources. It is hoped that the ITAC funding of the proposed Operating Systems Specialist position will dramatically improve the level of service and the educational impact of the various technologies at use in the School.

SOA Instructional Technology Fee

The School of Architecture implemented an Instructional Technology Fee for students in the AY 1995-96. This fee is primarily allocated to salaries and is not considered in budgeting for other purposes. We have submitted repeated applications to increase this fee, but have been denied. Although this fee is now a part of the flat fee system, the allocation has not changed.

SOA Special Equipment Fund

A portion of the School of Architecture's annual operating budget is the Special Equipment Account. The annual Special Equipment budget is approximately \$100,000. This account is the primary source of money for faculty and staff computing, it is also used to support our AV and shop facilities and to subsidize essential technology programs not funded or partially funded by ITAC.

SOA IT Revolving Fund

All IO Central services are charged to students through the BevoBucks system. In addition, faculty and staff may use the input and output devices in this facility if they provide a UT account number. These funds go into the SOA IT Revolving account and are used to pay for the consumables used in the operation of the Computer Lab and IO Central. Since our academic programs are very output intensive, the priority for these services is that they remain inexpensive and available to the students. Activity on this account is a good metric of the volume of services provided to our students, even with our minimal cost-recovery pricing, the revolving fund had over \$50,000 of activity last AY.

Previous expenditures (AY 2004-05, and partial AY 2005-06):

New Color and Black & White Laser Printers <i>Centralized Portfolio Quality Printing (project)</i>	\$25,000
Network Upgrades <i>Network Infrastructure (recurring)</i>	\$30,000
New Print Server and Plotters <i>Computer Lab Printing Facility (project)</i>	\$30,000
New InVision 3Dsi 3 Dimensional Printer <i>Digital Fabrication (\$42,000 project, \$6,000 recurring)</i>	\$51,000
New 24"x48" Laser Cutter <i>Digital Fabrication (project)</i>	\$75,000
Ductwork for installation of Laser Cutter <i>Digital Fabrication (project)</i>	\$30,000
New Computer Lab Workstations and peripherals <i>Cyclical Replacement of Equipment (recurring)</i>	\$80,000
Software Licensing <i>Software Acquisition and Licensing (recurring)</i>	\$80,000
IO Staff positions <i>Computer Lab and IO Central Staff (recurring)</i>	\$51,000
Total	\$452,000

Needs and Proposed Use of Funds:

There are three items which I feel require special attention within this proposal. All of the needs stated in the summary are important, but these are critical and high-impact:

- **New recurring funding for an operating systems specialist.** Without another staff member with this type of expertise we will be unable to continue the process of improving our digital-curricular integration, level of service to students, and the reliability of our technology infrastructure. (\$55,000/year new recurring)
- **Digital Fabrication Project.** The positive and impact of obtaining and utilizing these tools upon recruiting, teaching, learning, innovation, and leadership would difficult to overstate. We need these technologies to move fully into the information age in our teaching and research. (\$150,000 project)
- **Computer Lab & IO Central Furniture Project.** We need to provide a healthy and productive digital work environment for our students, and that must include appropriate space, lighting, and furnishings. This project allocation will be a significant first step to dealing with these environmental issues. (\$60,000 project)

Please feel free to contact me if you require any additional information or clarifications. Thank you for your attention to these matters and for your devotion to improving the state of Information Technology at The University of Texas at Austin.

Sincerely,



Eric Hepburn
Director of Information Technology
School of Architecture
The University of Texas at Austin

ehepburn@austin.utexas.edu
phone: 512.471.0729
mobile: 512.694.7067
fax: 512.471.0716