



Information Technology at the Institute

The Institute for Advanced Learning and Research (IALR) resulted from collaboration among localities in Southside Virginia, public and private organizations, and colleges—notably Danville Community College, Averett University, and Virginia Tech. One critical group is the Future of the Piedmont Foundation, a group of private business people dedicated to the economic transformation of the region. The Institute’s mission is to develop both technology and talent to transform the economy of Southside. Tools include advanced learning, research and technology transfer, and development of technology infrastructure. The Institute serves as a catalyst for an innovative, high-tech, network-based economy. Outreach and International Affairs at Virginia Tech coordinates the university’s contributions to the Institute.

On June 12, the Institute's \$15 million research facility was dedicated. The building at has 25 classrooms, computer and science labs, an electronic library and a large conference area. More than 15,000 square feet have been reserved for research.

Nancy Franklin coordinates Institute activities with Virginia Tech’s IT organization, including the deployment of advanced network infrastructure. She connects information technology expertise at Virginia Tech with local and private sector collaborators, and coordinates technology adoption programs designed for local citizens, including teachers, youth, and community leaders. Current activities are associated with a US Department of Education faculty development grant for the region’s K-12 teachers.

<http://www.ialr.vt.edu/about/>

Find information

- answers.vt.edu
- computing.vt.edu
- [CNS FAQs](#)
- [Online Course Support](#)
- [Element K](#)
- security.vt.edu
- antivirus.vt.edu
- [Annual Report](#)

Wireless Local Area Network

The Wireless Local Area Network is expanding. Communications Network Services (CNS) has been operating a pilot Wireless Local Area Network (WLAN) service in selected university buildings for students, faculty, and staff. Over this summer, CNS will expand wireless service availability throughout the majority of the Blacksburg campus's academic and administrative buildings. By the beginning of the 2004 fall semester, wireless service will be available in most academic and administrative buildings.

To prepare, CNS wireless site surveyors are conducting radio frequency measurements in academic and administrative buildings. This survey will be followed by installation of cables and wireless access points. Staff will be busy with equipment in various buildings throughout the summer.

Although the date the university's WLAN service will be activated in any given building has not yet been established, the goal is to have it in operation by fall semester. Updates about Virginia Tech's WLAN service are available at <http://www.cns.vt.edu/html/wireless/wlan/>.

To use the wireless network, each computer must be registered using its MAC—Media Access Control protocol—address. The service is available to faculty, staff, and students who have a valid and active PID.

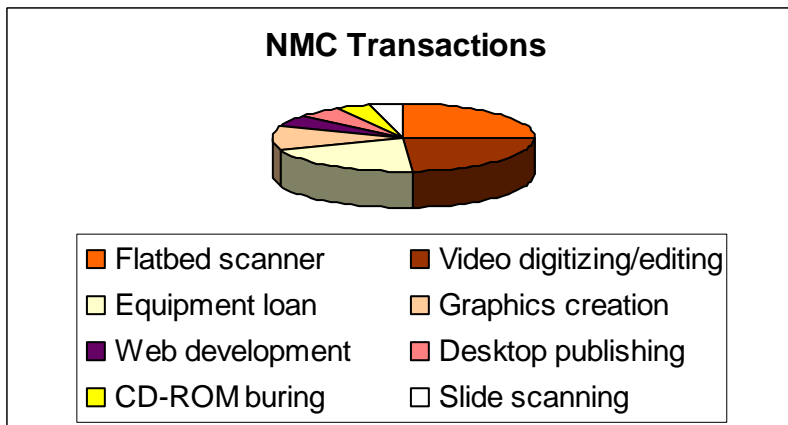
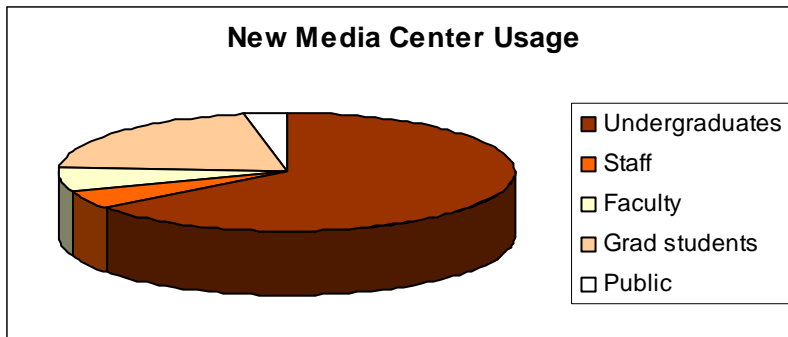
The university's WLAN service complies with the IEEE standard 802.11g in most cases, or with 802.11b. Both standards utilize the 2.4GHz "Industrial, Scientific, & Medical" (ISM) unlicensed frequency band.

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New Media Center

The New Media Center is available to the public as well as to all members of the Virginia Tech community. During the past year, the statistics of usage show that students—undergraduates and graduate students—use the center most. Scanning and digitizing are the most used features.



New Element K Courses

Learning Technologies has Cisco courses to the Element K online tutorials. These courses, free to students, faculty and staff at VT, are available by special request only, by sending email to elementk@vt.edu. Since slots are limited, they will be assigned for a 30-day period.

- Building Cisco Multilayer Switched Networks
- Building Cisco Remote Access Networks
- Building Scalable Cisco Internetworks
- Interconnecting Cisco Network Devices
- Cisco Internetwork Troubleshooting
- Cisco Router Security
- Designing Perimeter Security
- Designing VPN Security

In addition, virtual labs offer hands-on experience with real routers, providing an experience similar to working on a production network.

Information Technology at Virginia Tech

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The May/June issue of Educause Review lists the current top ten IT issues.

1. Funding
2. Administrative Systems
3. Security/Identity Management
4. Strategic Planning
5. Faculty Development
6. Infrastructure Management
7. E-Learning
8. (tie) Web Services and Enterprise Portals
10. (tie) Organization and Leadership