

# Information Technology



Office of the Vice President  
for Information Technology



**VirginiaTech**  
*Invent the Future*

# New Faculty and Staff: Getting Started with Information Technology

Start with these basic steps, and for more detailed information, see “Help and Tutorials: Getting Started” on [www.computing.vt.edu](http://www.computing.vt.edu). Your department will assist with hardware for computing and communications.

- Read the Acceptable Use Guidelines to understand your responsibilities. [www.policies.vt.edu/acceptableuse.php](http://www.policies.vt.edu/acceptableuse.php)
- Create your personal online identifier—your **PID**. With the associated password, the PID is your key to e-mail, course management systems, library databases, online personal information, and many other services. See [my.vt.edu](http://my.vt.edu).
- You or your departmental system administrator need to be sure your computer has appropriate security settings. Run the **VTnet CD**, a collection of software that will help you configure your computer to be secure and to run Virginia Tech services ([www.antivirus.vt.edu/proactive/vtnet2007.asp](http://www.antivirus.vt.edu/proactive/vtnet2007.asp)).
- Connect to the Internet—from your office connections established by your department or through the wireless network. Use the VPN to connect securely over wireless.
- Configure your e-mail. Faculty and staff members are encouraged to use the **Exchange** ([www.computing.vt.edu/exchange/](http://www.computing.vt.edu/exchange/)) service, a premier e-mail and calendaring solution. This service includes integrated e-mail, appointments, tasks, contacts, and public folders. Establish your account through Hokies Self-Service (<https://selfservice.w2k.vt.edu>).
- Set your preferences for VT Alerts ([www.alerts.vt.edu](http://www.alerts.vt.edu)).
- Your first source for more information: [www.computing.vt.edu](http://www.computing.vt.edu).
- Your source for help with computing: [www.4help.vt.edu](http://www.4help.vt.edu) or 540/231-4357, or contact your departmental support staff.

You will find additional services and sources of help in this guide.

This guide is posted at [www.computing.vt.edu](http://www.computing.vt.edu) with detailed links to additional information and support.

Acceptable use of information technology is ethical, reflects academic honesty, and shows restraint in the consumption of shared resources. It demonstrates respect for intellectual property, ownership of data, system security mechanisms, and individuals' rights to privacy and to freedom from intimidation and harassment.

Virginia Tech is an equal opportunity/affirmative action employer

## Notification system

The VT Alerts system is a comprehensive communication suite established by University Relations for delivering urgent messages to students, faculty, and staff. In addition to existing communication methods—university-provided e-mail and voicemail, the vt.edu homepage, the university hotline (540/231-6668), and the campus-wide siren and public-address system—new features have been added to allow delivery of alerts via text and voice messages to alternate phone numbers and e-mail addresses. To activate, go to the VT Alerts website at [www.alerts.vt.edu](http://www.alerts.vt.edu).

## Security for sensitive data

All university data must be handled appropriately. With the epidemic of identity theft, certain data elements should NOT be stored in clear text on desktops, laptops, or portable devices. These include Social Security numbers, credit/debit card numbers, bank account numbers, or names with dates of birth or other common identifiers. Review the new Social Security number policy ([www.policies.vt.edu/1060.pdf](http://www.policies.vt.edu/1060.pdf)) and run Find\_SSNs on your computer (available from [www.security.vt.edu](http://www.security.vt.edu)) to identify unneeded SSNs.

## Junk Mail Manager

A new anti-spam measure, Junk Mail Manager, quarantines e-mail suspected to be spam. You will receive e-mail reports of mail that is being held in the Junk Mail Manager folder rather than sent to your inbox. To set your own rules, go to the Junk Mail Manager interface at <https://junk.mail.vt.edu/spam>.

## Student data marts in the Data Warehouse

Basic information on students is available through the data warehouse to approved individuals in academic departments, colleges, and other student-oriented offices. For more information, see “Administrative Systems” on [computing.vt.edu](http://computing.vt.edu).

## Microsoft Vista

Stay informed about evolving software compatibility with Microsoft’s new operating system through the Vista Update Center on [computing.vt.edu](http://computing.vt.edu).

## IM

Find out more about Virginia Tech’s new instant messaging (IM) system under “E-mail & Calendaring” on [computing.vt.edu](http://computing.vt.edu).

# Security

## Protect your computer, protect university systems

University policy (see Policy 7010 [www.policies.vt.edu/7010.pdf](http://www.policies.vt.edu/7010.pdf)) requires that everyone participates to ensure the security of computing devices, university data, and the university network. Be sure to:

- Keep your operating system up-to-date;
- Run an Internet firewall, included in operating systems or available from Software Distribution ([ita.vt.edu](http://ita.vt.edu));
- Install antivirus software ([antivirus.vt.edu](http://antivirus.vt.edu));
- Maintain physical security for critical, confidential or sensitive resources;
- Ensure adequate backup (See “Security & Viruses: Backup” on [computing.vt.edu](http://computing.vt.edu));
- Select strong passwords (Search for “creating strong passwords” on [computing.vt.edu](http://computing.vt.edu) for advice).

For more security information, see [www.security.vt.edu](http://www.security.vt.edu).

The **VTNet 2007 CD** is available from Software Distribution on Torgersen



Bridge. This CD will set your computer for many of the measures listed in Policy 7010.

Additional security tools and options include the routine updates available from **VT WSUS** (Look under “Security” on [computing.vt.edu](http://computing.vt.edu)) and University Services (<https://selfservice.w2k.vt.edu>) that also provides related software updates.

To examine your system’s security, use **SafetyNet** at <https://safetynet.w2k.vt.edu>.

## Personal and sensitive data

Do you work with student grades, credit card numbers, or perhaps sensitive research data? To protect data, consider **Network Attached Storage** (see “Infrastructure Services: NAS” on [computing.vt.edu](http://computing.vt.edu)) rather than downloading data to local or portable devices. **Filebox** is another option for files that need to be shared with carefully controlled access ([filebox.vt.edu](http://filebox.vt.edu)). Groups and research projects may share files through **Scholar** websites ([scholar.vt.edu](http://scholar.vt.edu)).



Secure your files against inappropriate access or distribution. Run Find\_SSNs on your computer, available from [www.security.vt.edu](http://www.security.vt.edu), to identify Social Security numbers stored in clear text on your desktops, laptops, and other devices, and then remove them.

If you suspect an unauthorized exposure of personal information, report it immediately to 4Help ([www.4help.vt.edu](http://www.4help.vt.edu)) or call 540/231-HELP.

### Spread the word

Awareness of security threats and protection is the first step in avoiding hacking, data exposures, and other security breaches. The Security Office staff is available for presentations

(540/231-7694). Also, see the FDI material on online security (search for “computer security” at [www.fdi.vt.edu](http://www.fdi.vt.edu)).



# Communications



**VT Alerts:** Subscribe to the VT Alerts Automated Notification Service and set your contact preferences at the website [www.alerts.vt.edu](http://www.alerts.vt.edu).

## Accessing the network

In on-campus buildings, wired Ethernet ports provide connectivity. Modem pool accounts are available for remote access. Subscribers to either of these services are also eligible to subscribe to both **wireless** and **Virtual Private Network** service. See [www.cns.vt.edu](http://www.cns.vt.edu).

**VT Mobile Messaging** service integrates personal digital assistant capability with mobile phone convenience. Supported devices are listed under “Mobile messaging” on [www.cns.vt.edu](http://www.cns.vt.edu) to provide continuous wireless synchronization with Exchange.

## Your e-mail addresses

Your e-mail account is named for your PID, and [PID@vt.edu](mailto:PID@vt.edu) is an e-mail address. Create up to three additional

alternate addresses or aliases for this account through the “Personal Info” tab at [my.vt.edu](http://my.vt.edu).

Virginia Tech provides two e-mail services, VT Mail for students and employees and Exchange for employees.

## Exchange

Available only to employees, Exchange provides e-mail, calendar management, and related tools, and permits you to delegate selective access to co-workers. Access Exchange through WebOutlook ([weboutlook.vt.edu](http://weboutlook.vt.edu)) or with software such as Outlook or Entourage. Establish your Exchange mailbox at <https://selfservice.w2k.vt.edu>.

Versatile mailing lists—**LISTSERVs**—can be configured for classes, discussions, event notifications, and news delivery. (See “E-mail & Calendaring” on [computing.vt.edu](http://computing.vt.edu)).

## IM

Point your IM client to Virginia Tech’s new instant messaging (IM) service (see “IM” under “E-mail & Calendaring on [computing.vt.edu](http://computing.vt.edu)).

## Mail

For more information on the services and options for handling letters and



packages, see **University Mail Services** website ([www.mailservices.vt.edu](http://www.mailservices.vt.edu)).

### Managing spam

Junk Mail Manager quarantines suspected e-mail spam in a separate folder. To set your rules and manage your folder, go to <https://junk.mail.vt.edu/spam>.

Incoming e-mail is tagged with a junk mail header if it appears to be spam. Use this header to set rules in your e-mail software to filter potential spam. Search [answers.vt.edu](http://answers.vt.edu) for “unwanted e-mail.”

Other techniques used to limit spam are blocking of known spam-sending sites and greylisting using MailHurdle. Review these topics listed under “E-mail & Calendaring” on [computing.vt.edu](http://computing.vt.edu).

### Remote conferencing

The university phone system facilitates **conference calling** for up to eight par-

ticipants. Use the state’s teleconferencing service ([www.cns.vt.edu](http://www.cns.vt.edu)) for more complex calls.

Recently redesigned and upgraded interactive video conferencing facilities enable Virginia Tech faculty and staff to offer classes and share expertise with peers worldwide ([www.vbs.vt.edu](http://www.vbs.vt.edu)).

The **Access Grid node**, an application of the Internet2 network architecture, provides large-scale distributed meetings, collaborative work sessions, seminars, lectures, and training. Services include multimedia large-format displays, presentation and interactive environments, and interfaces to Grid middleware and visualization tools. Call 540/231-6460.

### Telephones

Telephone service is available to meet different needs. To order or change services, contact [cnsdesign@vt.edu](mailto:cnsdesign@vt.edu).







Multimedia facilities at the **New Media Center** are suitable for student projects and for creating instructional materials ([www.nmc.vt.edu](http://www.nmc.vt.edu)).

**Digital Imaging** provides archival scanning for existing image collections for instructional and research purposes. To submit a proposal, see [www.emd.vt.edu](http://www.emd.vt.edu).

**Video/Broadcast Services** assists with streaming files, downloadable files, and video conferencing ([vbs.vt.edu](http://vbs.vt.edu)).

### Evaluation and assessment

**Test Scoring** provides optical mark reader processing of forms (opscans) used for exams and course evaluations ([www.testscoring.vt.edu](http://www.testscoring.vt.edu)).

Evaluation tools are available in **Blackboard** ([learn.vt.edu](http://learn.vt.edu)) and in **Scholar** ([scholar.vt.edu](http://scholar.vt.edu)). An online course evaluation tool for student ratings of instruction is available at [courseeval.cc.vt.edu](http://courseeval.cc.vt.edu).

### Computer-Integrated Classrooms

The staff of Computer-Integrated Classrooms ([www.cclab.vt.edu](http://www.cclab.vt.edu)) supports instruction needing specialized software or controlled environments—including online test-taking.

### Assistive Technologies

The Assistive Technologies unit supports disability accommodations based on assistive technologies for students, faculty, and staff. Call 540/231-3461.

# Research

## High-performance computing

For access to **System X**, the 2,200-processor supercomputer, submit project information at [www.arc.vt.edu](http://www.arc.vt.edu). A faculty panel makes the allocations. This year brings new opportunities for storage, along with new software. For training and support, see the “Services and Support” section of the webpage.

**Dante**, a Sun Fire v480 system, runs Solaris 9 and supports SAS, MATLAB, GAUSS, and the IMSL Subroutine Libraries.

**Inferno**, an SGI ALTIX 3700 Supercluster, recently upgraded to 128 processors, provides high-performance computing on an SGI hardware platform. Software includes ABAQUS, GASP, Gaussian, and Mathematica. A new SGI 4700 with 64 processors is available.

For access and information on these research computing systems, see [www.arc.vt.edu](http://www.arc.vt.edu).

## Access to global networks

The campus network connects to multiple high-performance research networks. The university takes a leadership role with responsibility for operating **NetworkVirginia**, Virginia’s optical



**VORTEX** network, and the mid-Atlantic node of the **National LambdaRail**. Virginia Tech has a 622 Mbps connection to NetworkVirginia and the Internet and a 10 Gbps link to access National LambdaRail, the **Mid-Atlantic Crossroads network**, and **Internet2’s Abilene** and **HOPI** networks. These national networks link major laboratories and computational centers throughout the country and peer with international research networks. Network Infrastructure and Services can help you take advantage of this connectivity to enhance your research, teaching, and collaboration. For more information, contact Jeff Crowder at 540/231-3900.

### Grant management

The **Data Warehouse** assists grant management with information on proposals and grants. E-mail [datawarehouse@vt.edu](mailto:datawarehouse@vt.edu) for access and training.

### Research collaboration

Use **Scholar** to facilitate collaboration with access controls for shared calendars, announcements, a file repository, and other collaboration tools ([scholar.vt.edu](http://scholar.vt.edu)).

In addition to Research Computing, several other IT units collaborate with faculty and student researchers. The **IT Security Lab's** test facility for cybersecurity research is available to faculty and qualified students. E-mail [itseclab@vt.edu](mailto:itseclab@vt.edu). The **Assistive Technologies Lab** collaborates on multidisciplinary research in assistive technologies and welcomes faculty and student research projects. Call 540/231-3461.

### Specialized software

Information Technology Acquisition

offers specialized software for engineering, GIS, mathematics, statistical analysis, and bibliography management. ITA welcomes additional software suggestions ([ita.vt.edu](http://ita.vt.edu)).

### Survey tools

Use [survey.vt.edu](http://survey.vt.edu) for online surveys, website feedback, and registration forms. **Test Scoring Services** assists with optically scanned paper survey forms ([www.testscoring.vt.edu](http://www.testscoring.vt.edu)).

### Support and training

Some **Faculty Development Institute** (FDI) workshops focus on specific research tools. Others concentrate on general research issues, including experimental design, external funding, and manuscript preparation ([www.fdi.vt.edu](http://www.fdi.vt.edu)).

In addition, **Graduate Education Development Institute** (GEDI) programs are available. For both FDI and GEDI opportunities, visit the "Training" section of the [www.arc.vt.edu](http://www.arc.vt.edu) website.



# Departmental Administration

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## Administrative reports

Find the human resources and finance reports under “Administrative Systems” on [computing.vt.edu](http://computing.vt.edu). Use the **Data Warehouse** for additional reports on human resources, finance, sponsored research, and student processes (e-mail [datawarehouse@vt.edu](mailto:datawarehouse@vt.edu)). Request specialized student reports by e-mailing [studentrequest@vt.edu](mailto:studentrequest@vt.edu).

## Security responsibilities

Visit [www.security.vt.edu](http://www.security.vt.edu) for tools and procedures to enhance the security of your information technology resources. Use Find\_SSNs to identify unneeded Social Security numbers. Schedule a security review. Staff will recommend ways to reduce vulnerability and risk, and ensure compliance with Policy 7010. Contact the IT Security Office at 540/231-7694.

Every three years, departments must complete the **risk assessment** regarding technology assets. Reports will be available from the IT Security Office so that departments can easily update from one assessment cycle to the next.

## E-mail for departments

Share responsibilities for departmental or project correspondence through **VT PACE Addresses**. See “E-mail and Calendaring” on [computing.vt.edu](http://computing.vt.edu).

## Hardware

Participation in the **Faculty Development Institute** ([www.fdi.vt.edu](http://www.fdi.vt.edu)) and the **Academic Client Computer** program (see “Administrative Systems: Banner” on [computing.vt.edu](http://computing.vt.edu)) helps update hardware. Computer Purchasing assists with departmental hardware purchases. See the **Laptop Leasing** program for departmental rentals ([ita.vt.edu](http://ita.vt.edu)).

## Web options

The **web hosting service** provides departmental website space (see “Internet & Web: Web Publishing” on [computing.vt.edu](http://computing.vt.edu)), and the **Blacksburg Electronic Village** ([www.bev.net](http://www.bev.net)) can assist with Web development. Call 540/231-4786.

Web accessibility standards are posted at [www.accessvt.atc.vt.edu](http://www.accessvt.atc.vt.edu).

## Copying and printing

**Printing Services** provides lithographic printing and operates two full-service Digital Print Centers that support photocopying, digital printing, and binding. Explore the benefits of leasing a photocopier with optional printer, FAX, and scanner functions through the Copier Management Program ([www.printing.vt.edu](http://www.printing.vt.edu)).

# Personal Information

## Public contact information

VT PeopleSearch ([www.vt.edu](http://www.vt.edu)) displays employees' work contact information.

Work contact information is also in the printed directory and in the Commonwealth of Virginia directory. Manage the display of your residential information from the "Personal Info" tab in *my.vt.edu*.

**Important:** If you suspect stalking, harassment, or threats, contact the Virginia Tech Police (emergency phone 911) or the Department of Human Resources immediately (540/231-9331).

Working **titles** are maintained by authorized departmental staff. See "Banner" and "HRIS" under "Administrative Systems" on [computing.vt.edu](http://computing.vt.edu).

## Administrative information

To manage **leave reports** online, see "Reports" under "Administrative Systems" on [computing.vt.edu](http://computing.vt.edu).

Using the "Personal Info" tab on *my.vt.edu*, update:

- Emergency contacts
- Address and telephone information
- W4 and VA-4 tax forms
- Your pay stub preference

View:

- leave balances
- pay stubs
- direct deposit breakdown
- earnings and deductions histories
- health and retirement benefit plans
- W2 information
- your VT ID number



# For Technical Personnel

See “**Resources for Computer Support Personnel**” under “Help & Tutorials” on [computing.vt.edu](http://computing.vt.edu).

Network with other technical personnel through the Techsupport LISTSERV. The **Departmental Computer Support Symposium** held in October and April is announced on Techsupport. To subscribe, see “E-mail & Calendaring: LISTSERV” on [computing.vt.edu](http://computing.vt.edu).

Share common solutions, links, tips, scripts, and source code on the **ITKnowHow wiki** ([itknowhow.w2k.vt.edu](http://itknowhow.w2k.vt.edu)).

## Services & tools

See [www.security.vt.edu](http://www.security.vt.edu) for **security tools**.

**Departmental software** allows departments to stay up-to-date at reasonable prices. See “Software & Hardware” on [computing.vt.edu](http://computing.vt.edu).

**Central Services** is a secure, flexible system for managing departmental Windows computers. See “Infrastructure Services: Hokies Domain” on [computing.vt.edu](http://computing.vt.edu).

**VT Windows Software Update Service** (VT WSUS) provides automatic updates to Microsoft Windows and core applica-

tions along with reporting capabilities for employees’ computers (See “Security: VT WSUS” on [computing.vt.edu](http://computing.vt.edu)).

Use the **Central Authentication Service** for secure single sign-on (“Infrastructure Services” on [computing.vt.edu](http://computing.vt.edu)).

Virginia Tech **SSL server certificates** enable server authentication and traffic encryption for Web communications. See “Security & Viruses: VT Digital Certificates” on [computing.vt.edu](http://computing.vt.edu).

The **Webmasters’ Toolkit**—“Internet & Web: Web Publishing” on [computing.vt.edu](http://computing.vt.edu)—includes the privacy statement generator for university Web pages.

The **Enterprise Directory** supports the online directory and helps manage access to online services. See “Infrastructure Services” on [computing.vt.edu](http://computing.vt.edu).

Request a **sponsored PID** for affiliates who are neither employees nor students (“Accounts & Access: PID” on [computing.vt.edu](http://computing.vt.edu)).





## General help

Help request form: [www.4help.vt.edu](http://www.4help.vt.edu)

From campus phones, 4-HELP  
540/231-HELP • 540/231-4357

Appointments to 4Help's Walk-In Service Center can be made when necessary.

Index of services  
[www.computing.vt.edu](http://www.computing.vt.edu)

For troubleshooting  
[www.answers.vt.edu](http://www.answers.vt.edu)

## Topical help

See answers to frequently asked questions on the **network and telephones** on the Help/FAQ page at [www.cns.vt.edu](http://www.cns.vt.edu).

For help specific to **Blackboard** and course management tools, see "help" at [learn.vt.edu](http://learn.vt.edu) or e-mail [ocs@vt.edu](mailto:ocs@vt.edu).

Security checklists are available on [www.security.vt.edu](http://www.security.vt.edu). For antivirus protection, see [www.antivirus.vt.edu](http://www.antivirus.vt.edu).

While on Torgersen Bridge, seek help from **TechConnect** at the central desk.

## Learn more

Increase your information technology skills with self-paced courses and tutorials at the **Software Skills Gateway**. See "Classes & Courseware: Software Skills" on [computing.vt.edu](http://computing.vt.edu).

## Status reports

For notices of planned maintenance downtime of centrally provided services and for information about unplanned outages, see [computing.vt.edu](http://computing.vt.edu), [my.vt.edu](http://my.vt.edu), or [www.cns.vt.edu](http://www.cns.vt.edu). Instructional systems outages are also posted at [learn.vt.edu](http://learn.vt.edu).



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